



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 8739/1
File Number: DWERVT4520
Duration of Permit: From 1 February 2021 to 1 February 2023

PERMIT HOLDER

Paris Grove Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 4257 on Plan 202951, Kentdale

AUTHORISED ACTIVITY

The permit holder must not clear more than 0.45 hectares of native vegetation within the area cross-hatched yellow in Figure 1 of Schedule 1.

1. Avoid, minimise, and reduce impacts and extent of clearing

In determining the native vegetation authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

2. Weed and dieback management

When undertaking any clearing authorised under this permit, the permit holder must take the following measures to minimise the risk of introduction and spread of *weeds* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no known dieback or weed-affected soil, *mulch*, *fill*, or other material is brought into the area to be cleared; and

- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

3. Directional clearing

The permit holder must conduct clearing activities in a slow, progressive manner to allow fauna to move into adjacent native vegetation ahead of the clearing activity.

4. Wind and water erosion management

The Permit Holder shall not clear native vegetation unless development for which the clearing is authorised is enacted within three months of the clearing being undertaken.

5. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

| No. | Relevant matter | Specifications |
|-----|---|---|
| 1. | In relation to the authorised clearing activities generally | <ul style="list-style-type: none"> (a) the species composition, structure, and density of the cleared area; (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings; (c) the date that the area was cleared; (d) the size of the area cleared (in hectares); (e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 1; (f) actions taken to minimise the risk of the introduction and spread of weeds and dieback in accordance with condition 2; and (g) Actions taken in accordance with conditions 3 and 4. |

6. Reporting

The permit holder must provide to the *CEO* the records required under condition 6 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table have the meanings defined.

Table 2: Definitions

| Term | Definition |
|-------------------|--|
| CEO | Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> . |
| clearing | has the meaning given under section 3(1) of the EP Act. |
| condition | a condition to which this clearing permit is subject under section 51H of the EP Act. |
| fill | means material used to increase the ground level, or to fill a depression. |
| dieback | means the effect of <i>Phytophthora</i> species on native vegetation. |
| department | means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3. |
| EP Act | <i>Environmental Protection Act 1986</i> (WA) |
| mulch | means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation. |
| native vegetation | has the meaning given under section 3(1) and section 51A of the EP Act. |
| Weeds | means any plant – (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i> ; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned. |

END OF CONDITIONS



Meenu Vitarana
A/SENIOR MANAGER
NATIVE VEGETATION REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

7 January 2021

SCHEDULE 1

The boundary of the area authorised to be cleared is shown in the map below (Figure 1).

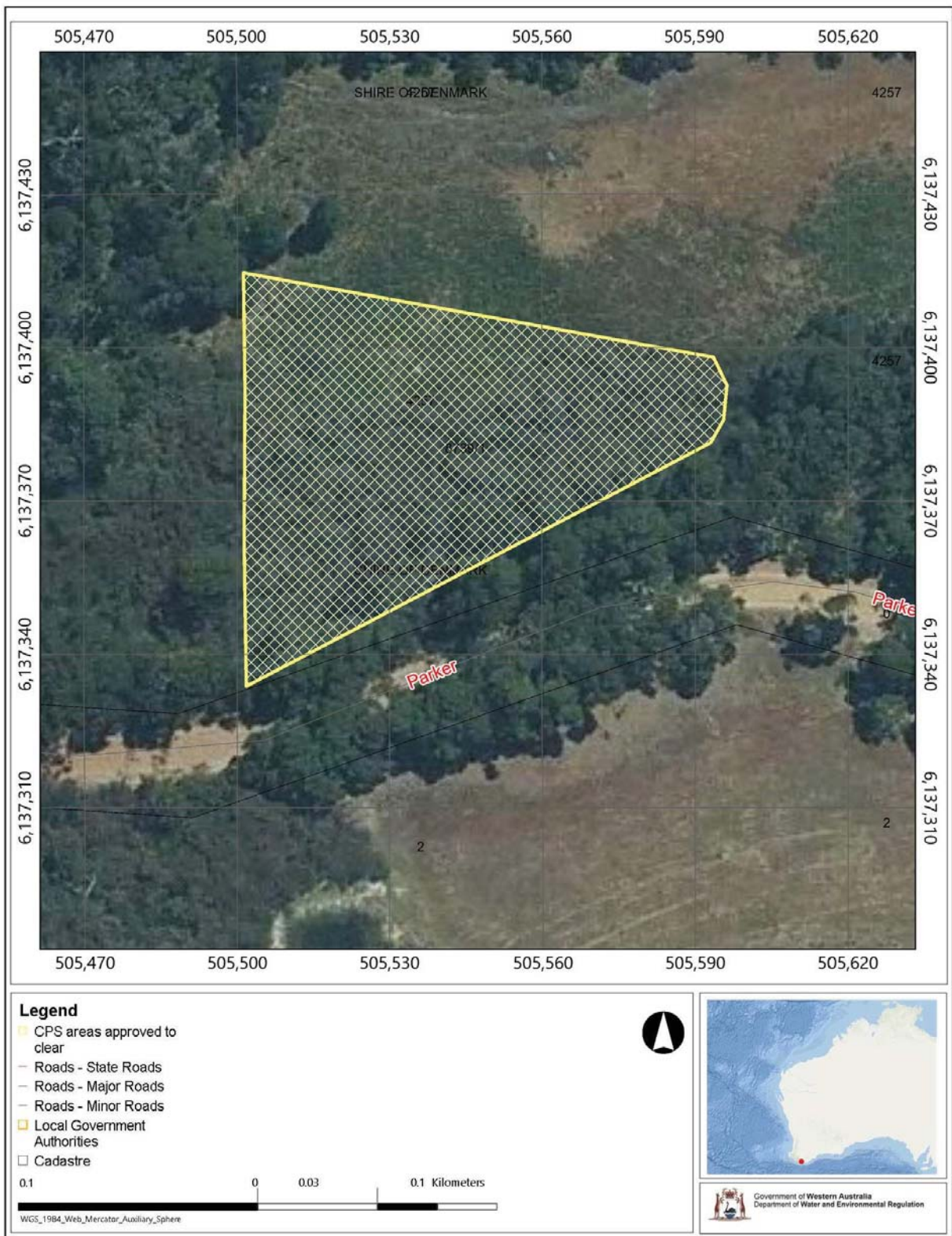


Figure 1: Map of the boundary of the area within which clearing may occur



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8739/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Paris Grove Pty Ltd
Application received date: 22 November 2019

1.3. Property details

Property: Lot 4257 on Plan 202951, Kentdale
Local Government Authority: Shire of Denmark
Localities: Kentdale

1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | Purpose category: |
|--------------------|-----------|--------------------|-------------------|
| 0.45087 | | Mechanical Removal | Dam Construction |

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 7 January 2021

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 at variance to principle (f), may be at variance to principle (g) and (i) and is not likely to be at variance to the remaining principles.

During assessment, it was determined that while the proposed clearing area may provide habitat for priority flora species and priority and threatened fauna species, including several threatened fish species, black cockatoo species and the sunset frog, impacts to these species are unlikely to be significant.

The Delegated Officer noted the proposed clearing area includes riparian vegetation associated with a nearby watercourse. Based on the mapped soil types, landscape position and local rainfall the proposed clearing may result in wind and water erosion and subsequently sedimentation of the watercourse present within the application area and potentially the Kent River downstream.

Given the above, the Delegated Officer considered that the proposed clearing is not likely to lead to an unacceptable risk to the environment and decided to grant a clearing permit subject to weed and dieback management, directional clearing, wind and water erosion management conditions.

2. Site Information

Clearing Description: The application is to clear 0.45087 hectares of native vegetation within Lot 4257 on Plan 202951, Kentdale, for the purpose of construction of a dam (Figure 1).

Vegetation Description: The vegetation within the application area is mapped as Granite Valleys, S1: tall open forest of *Eucalyptus diversicolor-Corymbia calophylla* on slopes with some *Eucalyptus patens* and *Eucalyptus megacarpa* on valley floors in hyperhumid and perhumid zones (Mattiske and Havel, 1998).

A site inspection undertaken by DWER staff (DWER, 2020a) identified two vegetation types:

- *Corymbia calophylla* (Marri) woodland over scattered shrubs, *Pteridium esculentum* (Braken) and sedges on the southern slope.
- *Taxandria* tall shrubland over a tall, dense *Lepidosperma* and *Juncus* sedge layer.

Vegetation Condition: Excellent; vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species;
to
Good; vegetation structure significantly altered with obvious signs of multiple disturbance. Retains basic vegetation structure or ability to regenerate (Keighery, 1994).

The vegetation condition of the native vegetation within the application area was determined during a site inspection undertaken by DWER staff (DWER, 2020a; Figure 3 - 6).

Soil type:

One soil type has been mapped within the application area, Minor Valleys S1 Subsystem (Walpole) (254WhS1), which is characterised by valleys in granitic terrain, narrow swampy floor; <20 m relief. Gravelly yellow duplex soils on smooth flanks; Jarrah-Marri-Karri forest. Peaty soils on narrow floor; Wattle low forest (Schoknecht *et al.*, 2004).

Comments:

The local area referred to in the assessment of this application is defined as a 10 kilometre radius measured from the perimeter of the application area.



Figure 1: application area



Figure 2: application area in context of Lot 4257 and Kent River



Figure 3: Wetland vegetation within application area



Figure 4: Wetland vegetation within application area



Figure 5: Fringing Marri vegetation within application area



Figure 6: Fringing Marri vegetation within application area

3. Minimisation and mitigation measures

The applicant has advised that there are no alternative areas to place the dam; an off-stream dam has been unsuccessful and there are few options for dam development outside of the proposed location.

4. Assessment of application against clearing principles

The vegetation within the application area is in a good to excellent condition (Keighery, 1994), with the riparian area comprising of a dense sedge layer and minimal weeds, and adjacent marri woodland showing some signs of disturbance and invasive weed encroachment (DWER, 2020a).

According to available databases 35 conservation significant flora species have been recorded within the local area, including 32 priority species and three threatened flora. Based on the available information, the habitat was determined to be suitable for eight species, and may be suitable for a further six species (Western Australian Herbarium, 1998-).

Species which the habitat is suitable:

- *Andersonia redolens* (Priority 2)
- *Banksia serra* (Priority 4)
- *Boronia virgata* (Priority 4)
- *Chamelaucium* sp. Nornalup (N.G. Marchant 76/125) (Priority 2)
- *Gonocarpus simplex* (Priority 4)
- *Spyridium riparium* (Priority 2)
- *Stylidium leeuwinense* (Priority 4)
- *Synaphea intricata* (Priority 3)

Species which the habitat may be suitable:

- *Andersonia hammersleyana* (Priority 2)
- *Lasiopetalum* sp. Denmark (B.G. Hammersley 2012) (Priority 3)
- *Leucopogon alternifolius* (Priority 3)
- *Microtis pulchella* (Priority 4)
- *Schizaea rupestris* (Priority 2)
- *Stirlingia divaricatissima* (Priority 3)

Based on the small size of the application area the proposed clearing is not likely to have a significant impact on Priority 3 and Priority 4 species; advice received from DBCA indicate the proposed clearing is unlikely to significantly impact on the Priority 1 and Priority 2 species outlined above (DBCA, 2020). Three flora species listed as threatened under the *Biodiversity Conservation Act 2016* have been recorded within the local area, however all are recorded in association with granite outcrops; no outcrops were noted on site and the landscape position indicates that habitat is not likely to be suitable for these species (DEWHA, 2008a; DEWHA, 2008b; DEWHA, 2008c; Western Australian Herbarium, 1998-).

A total of 13 conservation significant fauna species have been recorded in the local area. Of these, six are aquatic species (five fish, one mussel) which have been recorded in the Kent River (located 565 metres downstream) and its associated tributaries, one tributary of which flows in an east-west direction through the application area. A site survey undertaken by DWER staff in February 2020 noted the presence of running water, however this was following a rainfall event (DWER, 2020a; Figure 7). As the tributary is likely to be non-perennial, the presence of Carter's freshwater mussel (*Westralunio carteri*) is unlikely; however it is considered that the application area may provide suitable habitat for the following conservation significant fish species:

- little pygmy perch (*Nannoperca pygmaea*) – Endangered,
- Balston's pygmy perch (*Nannatherina balstoni*) – Vulnerable,
- pouched lamprey (*Geotria australis*) – Priority 3,
- western dwarf galaxias (*Galaxiella munda*) – Vulnerable (delisted in 2006, TSSC, 2006), Threatened (WA),
- western trout minnow (*Galaxias truttaceus* (Western Australian population)) – Endangered.

Advice from DBCA has indicated that The Kent River and its tributaries are important habitat for the threatened fish species. There are records in the section of the Kent River near the connection with the tributary of the application area. Even if the tributary is not flowing adequately for most of the year, it still may be suitable habitat for the fish for part of the year. If winter rains significantly increase the creek water level, then fish may migrate up the creek, due to the connectivity to the Kent River (DBCA 2020).

A targeted aquatic fauna survey was conducted of a length of the Kent River tributary within the application area, encompassing approximately 30 metres upstream of the application area to approximately 580 metres downstream of the application area to the confluence of the tributary to the Kent River (Bio Diverse Solutions, 2020). The survey acknowledged that whilst this watercourse may provide suitable habitat for the above fish species, none of these species were recorded within the area surveyed, and two complete barriers to water flow were identified downstream of the application area which would be expected to prevent fish from moving from the Kent River to the application area. As such, it is considered unlikely that the above conservation significant fish species would be impacted by the proposed clearing.

Rakali (*Hydromys chrysogaster*), listed as a Priority 4 species, and south-western brush-tailed phascogale (*Phascogale tapoatafa wambenger*), listed as conservation dependant fauna, have been recorded less than 1 kilometre from the application area; the proposed clearing likely comprises suitable habitat for these species. Based on the dense wetland vegetation the application area is also likely suitable habitat for Quenda (*Isoodon fusciventer*), noting that similar (although not Priority or Threatened) species *Isoodon obelusulus* was recorded by Bio Diverse Solutions (2020) close to the application area in similar habitat. However, based on the percentage of remnant vegetation within the local area the proposed clearing is not likely to comprise significant habitat for these species. A condition to undertake clearing in a directional manner to allow fauna to move into adjacent vegetation will minimise impacts to individual fauna that may be present within the application area.

The sunset frog (*Spicospina flammocaerulea*) is recorded in association with peaty soils; the site inspection identified the potential for peaty soils in the areas of sedgeland and noted other amphibians during the inspection (TSSC, 2019; Figure 7, Figure 8). Advice received from DBCA indicate that the habitat is not likely suitable for the species, with different flora assemblages note in suitable habitat (DBCA, 2020).



Figure 7: Creekline and soil type



Figure 8: Amphibians noted during site inspection

A total of 36 trees were recorded within the application area during the site inspection undertaken by DWER. The vast majority of these were *Corymbia calophylla* (marri), with some *Eucalyptus marginata* (jarrah) and an *Allocasuarina* sp. (sheoak) also recorded (DWER, 2020a). Threatened black cockatoos (Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*) and forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*)) typically utilise marri trees for foraging, particularly Baudin's and forest red-tailed black cockatoos whose primary food source is marri seeds and flowers (DEE, 2013). None of the trees recorded a diameter at breast height over 500 millimetres indicating that the trees proposed to be cleared

are not suitable for black cockatoo breeding (DEE, 2013). As there were no larger trees or evidence of roosting it was determined that the application area did not contain suitable night roosting habitat as black cockatoos typically prefer taller trees to roost (DEE, 2013). Although the application area contains foraging habitat for black cockatoos, based on the level of remnant vegetation in the local area, the proposed clearing is not likely to contain significant foraging habitat for black cockatoos.

No conservation significant ecological communities (including species listed as Threatened under the *Biodiversity Conservation Act 2016*) were recorded in the local area; the application area is not likely to comprise, or be necessary for the maintenance of an ecological community.

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, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). The Warren region currently has 80 per cent of the pre-1750 extent remaining, with the Granite Valleys, S1 vegetation complex having 84.6 per cent remaining (Government of Western Australia, 2018). Within the local area 66.6 per cent of the area that was vegetated pre-1750 remains (Government of Western Australia, 2018). Based on the high level of vegetation cover in the local area and the small size of application area, the proposed clearing is not significant as a remnant of native vegetation in an area that has been extensively cleared.

The application area is located within Kent River catchment zone, with the Kent River located approximately 565 metres from the application area. There is a minor, non-perennial watercourse that runs through the centre of the application area into the Kent River. A site inspection undertaken in February 2020 by DWER staff noted that this watercourse was flowing and was surrounded by riparian vegetation (DWER, 2020a). The proposed clearing may cause erosion and runoff, however given the extent of the application area, water quality impacts are considered to be temporary and minimal. A condition placed on the permit requiring the clearing and dam construction to occur successively will minimise erosion and impacts to surface water quality.

The mapped soil type within the application area has a high risk of wind erosion. Based on the landscape position and rainfall the application area may also be impacted by water erosion, particularly in winter months. There is a high susceptibility for subsurface acidification of soils and a moderate risk of phosphorus export within the application area, however, based on the small size of the application area the proposed clearing is not likely to have a significant impact on these factors. There is a low risk of salinity, flooding and waterlogging within the application area. Although the proposed clearing may result in wind and water erosion, given the extent of the application area any land degradation impacts from wind and water erosion are expected to be temporary and minimal. A condition placed on the permit requiring the clearing and dam construction to occur successively will minimise the occurrence of wind and water erosion.

The application area is located approximately 580 metres west of Mouth Roe National Park. Given the distance from the application area and the high level of vegetation between the application area and the National Park (Figure 1) the proposed clearing is not likely to have an impact on the environmental values of this area. Weed management conditions will minimise the risk of the introduction and spread of weeds and dieback into surrounding remnant vegetation.

Based on the size of the application area the proposed clearing is not likely to cause, or exacerbate, the incidence or intensity of flooding.

Planning instruments and other relevant matters.

The application area is within Zone C of the Kent River Water Reserve Catchment, an area subject to clearing controls under the *Country Areas Water Supply Act 1947* to prevent the salinization of water resources. Zone C is the lowest risk zone for salinization within the Kent River Water Reserve Catchment area, clearing for farm management purposes, including the construction of off-stream dams, within this zone are normally approved (WRC, 1996). However, the application is for the construction of an on-stream dam, and subsequently the vegetation falls within a riparian area. The applicant has provided information that an off-stream dam was unsuccessful previously; advice received from the relevant authority has advised that objecting to this proposal would be unreasonable, although a commitment from the land owner to revegetate around the dam footprint would demonstrate good land management practice and help to mitigate any water quality impacts (nutrient runoff and salinity) (DWER, 2020b).

No Aboriginal sites of significance have been mapped within the application area, with the closest registered site over 13 kilometres from the application area.

The construction of a dam may impact the hydrology of the local area, with a range of conservation significant aquatic species recorded within the local area in the Kent River. The end-use impacts are not within the scope of this assessment.

The clearing permit application was advertised on the DWER website on 25 December 2019 with a 14 day submission period. No public submissions were received.

The development approval was issued 8 January 2020, after a site inspection and consideration and acceptance that there are no other options on the property for securing a water supply. The Shire's development approval requires fencing of the creek line vegetation above the dam to ensure that stock do not have access to the dam and measures to ensure that dam construction methods required to not sensibly diminish flows within the watercourse at all times and may include bypass channels with flow gates or stop boards (Shire of Denmark, 2020).

5. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of the Environment and Energy (DEE) (2013) Environment Protection and Biodiversity Conservation Act 1999 referral guidelines for three threatened black cockatoo species: Carnaby's cockatoo (endangered) *Calyptorhynchus latirostris*, Baudin's cockatoo (vulnerable) *Calyptorhynchus baudinii*, Forest red-tailed black cockatoo (vulnerable) *Calyptorhynchus banksii naso*. DEE, Canberra.
- Department of the Environment, Water, Heritage and the Arts (DEWHA) (2008a). *Approved Conservation Advice for Banksia verticillata (Granite Banksia)*. Canberra: Department of the Environment, Water, Heritage and the Arts.
- Department of the Environment, Water, Heritage and the Arts (DEWHA) (2008b). *Approved Conservation Advice for Kennedia glabrata (Northcliffe Kennedia)*. Canberra: Department of the Environment, Water, Heritage and the Arts.
- Department of the Environment, Water, Heritage and the Arts (DEWHA) (2008c). *Approved Conservation Advice for Verticordia fimbrialepis subsp. australis (Southern Shy Featherflower)*. Canberra: Department of the Environment, Water, Heritage and the Arts.
- Department of Water and Environment Regulation (DWER) (2020a) Site Inspection Report for Clearing Permit Application CPS 8739/1. Site inspection undertaken 13 February 2020. Department of Water and Environment Regulation, Western Australia (DWER Ref: A1968777).
- Department of Water and Environmental Regulation (DWER) (Regulatory Services – Water) (2020b) *Country Areas Water Supply Act 1947 advice* (DWER Ref: A1858135).
- Government of Western Australia (2018) 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- 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.
- Shire of Denmark (2020) Supporting Information for clearing permit application CPS 8739/1. Shire of Denmark. Received by DWER on 8 January 2020 (DWER Ref: A1857163).
- Threatened Species Scientific Committee (2006). *Commonwealth Listing Advice on Galaxiella munda*. In effect under the EPBC Act from 24 November 2006.
- Threatened Species Scientific Committee (2019). *Conservation Advice Spicospina flammocaerulea Sunset Frog*. Canberra: Department of the Environment and Energy.
- Water and Rivers Commission (WRC) (1996) Policy and Guidelines: Granting of Licences to Clear Indigenous Vegetation in Catchments Subject to Clearing Control Legislation. Water and Rivers Commission, Western Australia.
- Western Australian Herbarium (1998-). FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> Accessed February 2020.

Publicly available GIS Databases used (data.wa.gov.au):

- Soil and Landscape Mapping – Best Available
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- IBRA Vegetation Statistics
- Remnant Vegetation
- Groundwater Salinity Statewide (DWER-026)
- Contours (DPIRD-073)
- Hydrography - Inland Waters - Waterlines
- Soil and Landscape Quality – Wind Erosion Risk (DPIRD-016)
- Soil and Landscape Quality – Water Erosion Risk (DPIRD-013)
- Soil and Landscape Quality – Waterlogging Risk (DPIRD-015)
- Soil and Landscape Quality – Water Repellence Risk (DPIRD-014)
- Soil and Landscape Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil and Landscape Quality – Phosphorus Export Risk (DPIRD-010)
- Soil and Landscape Quality – Salinity Risk (DPIRD-009)
- Flood Risk (DPIRD-007)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Regional Parks (DBCA-026)
- Aboriginal Heritage Places (DPLH-001)
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- CAWSA Part 2A Clearing Control Catchments (DWER-004)

Restricted GIS Databases used:

- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- TECs and PECs
- TECs and PECs (buffered)
- Black Cockatoo roost sites
- SWF Vegetation Complex Statistics