



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 5824/1
File Number: 2013/000832-1
Duration of Permit: From 8 March 2014 to 8 March 2016

PERMIT HOLDER

Barry James Vincenti
David Anthony Vincenti

LAND ON WHICH CLEARING IS TO BE DONE

Lot 4 on Plan 14837 (BAMBUN 6503)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 2.3 hectares of native vegetation within the area hatched yellow on attached Plan 5824/1.

CONDITIONS

Nil.

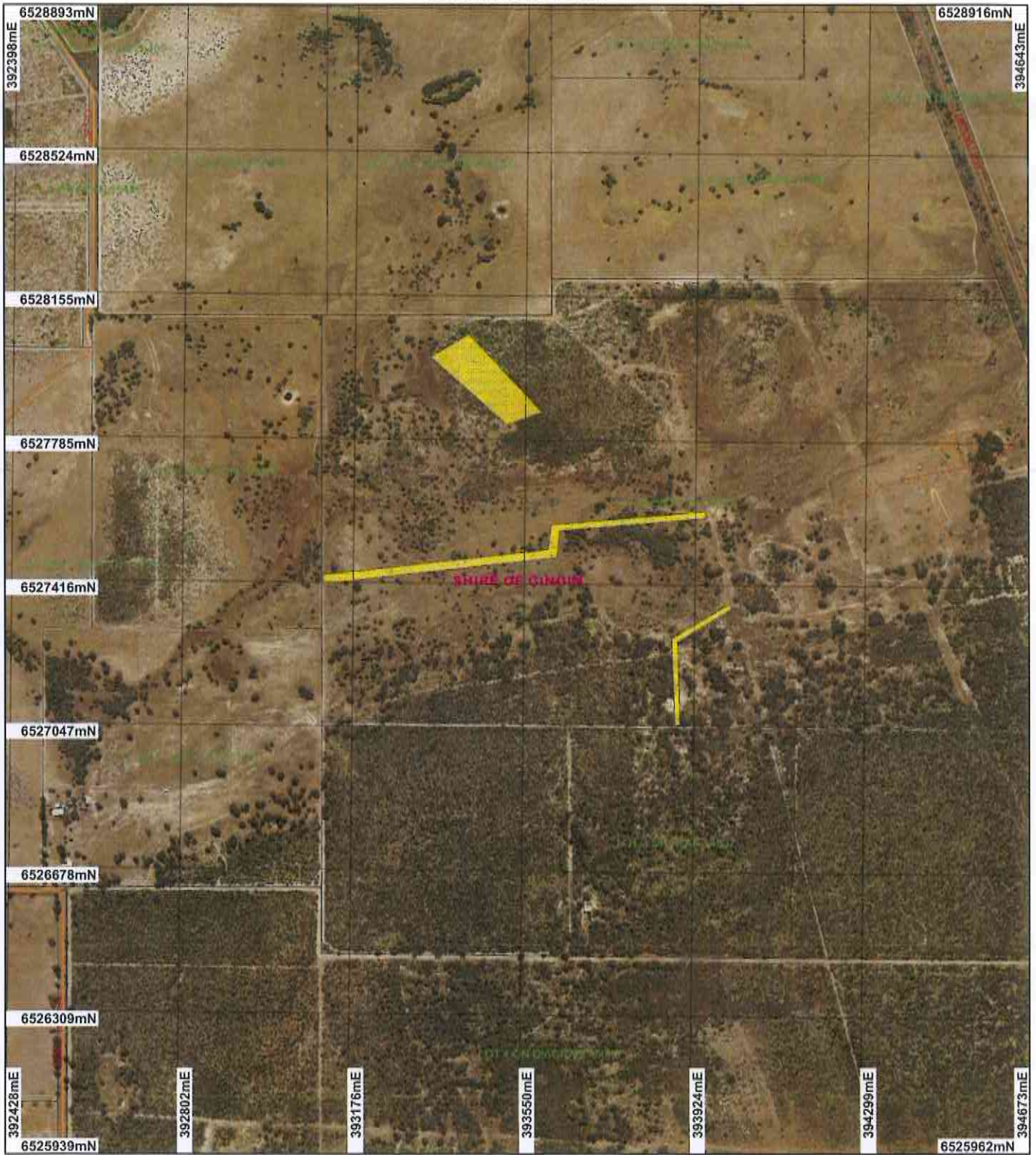
A handwritten signature in cursive script, appearing to read "Matt Warnock", written over a horizontal line.

Matt Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

6 February 2014

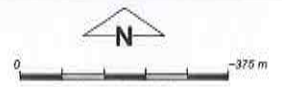
Plan 5824/1



LEGEND

- Road Centrelines
- Cadastre
- Local Government Authorities
- Clearing Instruments
- Areas Approved to Clear

Perth Metropolitan Area
North 15cm Orthomosaic -
Landgate 2012



Scale 1:13099
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M Warnock Date 6/2/14

M Warnock
Officer with delegated authority under Section 20 of
the Environmental Protection Act 1986

Information derived from this map should be
confirmed with the data custodian acknowledged
by the agency acronym in the legend.



Government of Western Australia
Department of Environment Regulation

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Clearing Permit Decision Report

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.: 5824/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Barry James and David Anthony Vincenti

1.3. Property details

Property: LOT 4 ON DEPOSITED PLAN 14837 (BAMBUN 6503)

Local Government Area: Shire of Gingin

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.3		Mechanical Removal	Grazing & Pasture

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 6 February 2014

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Mapped Beard Vegetation Association 1014 is described as low woodland; banksia / Shrublands; teatree thicket (Shepherd et al 2001).	The clearing consists of 2.3 hectares of native vegetation on Lot 4 on Plan 14837, Bambun, Shire of Gingin, for the purpose of grazing and fence lines.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The application is to clear 2.3 hectares of native vegetation for the purpose of grazing and fencelines. The application is divided into three sections. A two hectare section is proposed to be cleared for livestock grazing, with only the mid and understorey to be removed and the trees to be retained. Two more sections at a total of 0.3 hectares are proposed to be cleared to construct fences and involve the removal of three <i>Melaleuca</i> sp. trees and possibly some mid and understorey.
Mapped Heddle Vegetation Complex - Yanga Complex is described as closed scrub and low open forest (Heddle et al 1980).		To Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The vegetation under application is in degraded to good (Keighery 1994) condition and consists of <i>Eucalyptus marginata</i> (jarrah) and <i>Allocasuarina</i> sp. in the drier areas, and <i>Melaleuca</i> sp. woodland with <i>Banksia</i> sp. and <i>Eucalyptus grandis</i> (flooded gum) in the wetter areas (DAFWA 2013). Native understorey is present in some areas and absent in others. Parts of the property have been extensively grazed in the past (DAFWA 2013). The original application has been amended to reduce the size of the proposed clearing, removing a one hectare section which is to remain vegetated for salinity management. The condition and description of the vegetation was determined using a land degradation assessment from the Department of Agriculture and Food Western Australia (DAFWA 2013) and aerial imagery (Gingin 50cm Orthomosaic - Landgate 2008).

3. Assessment of application against clearing principles

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

Comments **Proposal is not likely to be at variance to this Principle**

The application is to clear 3.3 hectares of native vegetation for the purpose of grazing and fence lines.

Only the mid and understorey are proposed to be cleared, with mature trees to be retained (except for approximately three Melaleuca trees). The vegetation is in degraded to good (Keighery 1994) condition and has been subject to disturbance in the past from extensive grazing and is likely to lack floristic diversity as a result. Areas of the property are subject to high salinity levels and there are bare patches where no vegetation is growing (DAFWA 2013).

A number of flora and fauna of conservation significance have been mapped within the local area (10 kilometre radius) however due to the level of disturbance from livestock grazing and high salinity, the application is unlikely to comprise significant habitat for any of these species.

One priority ecological community has been mapped within the local area, known as Banksia yellow-orange sands (priority 2), described as Banksia woodland of the Gingin area restricted to soils dominated by yellow to orange sands. This ecological community is mapped to occur 6.7 kilometres to the south-east of the application area in different vegetation and soil type. Due to the different vegetation and soil type, the application area is not representative of this ecological community and the proposed clearing will not impact upon it.

Considering the level of disturbance and the condition of the vegetation, the area under application is unlikely to contain high biodiversity in comparison to other vegetation remnants in the local area (10 kilometre radius).

Therefore, the application is not likely to be at variance to this principle.

Methodology References

- DAFWA (2013)
- Keighery (1994)
- GIS Databases
- SAC Biodatasets (accessed November 2013)

(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 indigenous to Western Australia.

Comments **Proposal is not likely to be at variance to this Principle**

Twelve fauna species of conservation significance have been mapped within the local area (10 kilometre radius) (DPaW 2007-).

The proposal is to clear shrubs and retain trees (except for approximately three Melaleuca trees for the fenceline) so there will be no impact to mature trees with hollows that may be present within the application area providing fauna habitat.

Carnaby's cockatoo (*Calyptorhynchus latirostris*), which is endemic to south-western Australia and classified as Endangered under the Environment Protection and Biodiversity Conservation Act 1999 and as 'rare or likely to become extinct' under the Western Australian Wildlife Conservation Act 1950, has been recorded within the local area. Mature trees with the potential to be utilised by Carnaby's cockatoo are being retained, and the vegetation proposed to be cleared does not provide suitable feeding habitat for them.

Some ground-dwelling fauna may occur within the application area such as the quenda (*Isodon obesulus* subsp. *fusciventer*), chuditch (*Dasyurus geoffroii*) and heath mouse (*Pseudomys shortridgei*), however the suitability of the habitat for ground dwelling fauna is likely to be limited due to the level of disturbance from livestock grazing, and the proposed clearing is unlikely to impact upon the conservation status of any fauna of conservation significance.

Considering the above, the application is not likely to be at variance to this principle.

Methodology References

- DPaW (2007-)

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

Comments **Proposal is not likely to be at variance to this Principle**

The closest record of rare flora is mapped approximately 4.5 kilometres from the application area, within a different vegetation and soil type.

Considering the level of disturbance and lack of floristic diversity due to livestock grazing and high salinity

levels, the application area is unlikely to contain suitable habitat for rare flora.

Therefore, the application is not likely to be at variance to this principle.

Methodology GIS Databases:
- SAC Biodatasets (accessed November 2013)

(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.

Comments Proposal is not likely to be at variance to this Principle

A threatened ecological community known as herb rich saline shrublands in clay pans (vulnerable) is mapped 3.3 kilometres to the south-east and 4.6 kilometres to the south of the application area within the same mapped soil type and similar vegetation type.

There is a possibility that the vegetation within the application area may once have been representative of this threatened ecological community, however considering the level of disturbance from livestock grazing and the mostly degraded condition (Keighery 1994), the application area is unlikely to now be representative of the threatened ecological community and the proposed clearing is unlikely to impact upon its conservation status.

Therefore, the application is not likely to be at variance to this principle.

Methodology References
- Keighery (1994)
GIS Databases:
- SAC Biodatasets (accessed November 2013)

(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.

Comments Proposal 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, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

The Shire of Gingin retains approximately 55 per cent of its original vegetation extent and the local area (10 kilometre radius) retains approximately 30 per cent of the original extent (Government of Western Australia 2013).

The application area is mapped as Beard Vegetation Association 1014 (Shepherd et al 2001) which retains approximately 56 per cent of the original extent within the Swan Coastal Plain IBRA Bioregion (Government of Western Australia 2013). The application area is also mapped as Heddle Yanga Complex (Heddle et al 1980) which retains approximately 19 per cent of the original extent (Government of Western Australia 2013).

Although the local area has been extensively cleared and the Yanga Complex (Heddle et al 1980) is poorly represented, the vegetation under application is not considered to be significant as a remnant in an extensively cleared area, due to the predominately degraded (Keighery 1994) condition of the vegetation, the level of disturbance caused by livestock grazing and high salinity levels, and the proposed selective clearing of shrubs only.

Therefore, the application is not likely to be at variance to this principle.

	Pre-European (ha)	Current Extent Remaining (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Swan Coastal Plain	1,501,221	587,708	39	35
Shire*				
Shire of Gingin	319,671	177,334	55	44
Beard Vegetation Association in Bioregion*				
1014	41,064	22,937	56	53
Heddle Vegetation Complex **				
Yanga Complex	26,177	4,884	19	1

Methodology References
- Commonwealth of Australia (2001)
- Government of Western Australia (2013)
- Keighery (1994)
- Heddle et al (1980)

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

Comments Proposal is at variance to this Principle

The application area is adjacent to a minor non-perennial watercourse and is within 100 metres of another minor non-perennial watercourse. The application area occurs within a multiple use wetland and there is a conservation category wetland mapped 500 metres to the east.

As the application occurs within a multiple use wetland, the proposed clearing involves the clearing of riparian vegetation. Therefore, the application is at variance to this principle.

Methodology GIS Databases

- Geomorphic wetlands (Classification), Swan Coastal Plain
- Geomorphic wetlands (Management Categories), Swan Coastal Plain
- Hydrography linear DoW

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

Comments Proposal is not likely to be at variance to this Principle

The soil within the application area is described as subdued dune-swail terrain with the chief soils being leached sands and other small areas of other sandy soils (Northcote et al 1960 - 1968). The topography is relatively flat with the application area being approximately 75 metres above sea level. The average annual rainfall of 800 millimetres is moderate.

Wind and water erosion is unlikely to cause appreciable land degradation as a result of the proposed clearing, due to the soil type and the lack of slope in the land (DAFWA 2013). There is a risk that some water logging and eutrophication may occur on the property if appropriate management actions are not implemented, however the risk is minimal and not likely to be exacerbated by the proposed clearing due to the slight elevation of the proposed clearing area in relation to the rest of the property (DAFWA 2013).

The salinity level on the property under application is mapped as being low (500-1000mg/L), however there are areas on the property that show evidence of higher salinity levels (DAFWA 2013). The application area itself is not showing evidence of high salinity, however there are bare patches devoid of vegetation in close proximity to the areas proposed to be cleared. The presence of several shallow groundwater dams on the property indicates that the depth of the groundwater is less than one metre (DAFWA 2013). Evidence of high salinity was observed on other parts of the property and in the local area (DAFWA 2013). Existing remnants of native vegetation are at risk of an increase in salinity levels and the bare patches of land subject to salinity are expected to increase in the absence of appropriate grazing management (DAFWA 2013). The proposed clearing of 2.3 hectares is unlikely to have a significant impact on the salinity levels resulting in appreciable land degradation (DAFWA 2013). The resulting land use of grazing livestock is likely to have a greater risk of exacerbating the salinity problem and appropriate grazing management is advised (DAFWA 2013). A grazing management plan will assist in mitigating the risk of increased salinity levels.

Considering the above, the proposed clearing is not likely to result in appreciable land degradation.

Methodology References

- DAFWA (2013)
- Northcote et al (1960-1968)
- GIS Databases
- Groundwater Salinity, statewide
- Rainfall, Mean Annual
- Soils, statewide
- Topographic Contours, Statewide

(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.

Comments Proposal is not likely to be at variance to this Principle

A number of conservation areas are mapped within the local area (10 kilometre radius). Nullilla Nature Reserve (Class C) is mapped 3.5 kilometres to the south-east, Yeal Nature Reserve (Class A and Class C) is mapped four kilometres to the south-west, Bambanup Nature Reserve (Class A) is mapped four kilometres to the south and Timaru Nature Reserve (Class A) is mapped eight kilometres to the south of the application area.

Due to the distance between the application area and the nature reserves, the nearest being 3.5 kilometres away, the proposed clearing will not cause any direct impacts to any conservation areas. Due to the level of disturbance to the area under application and the retention of other native vegetation within the property, the

proposed clearing is unlikely to alter any ecological linkages or stepping stones, causing indirect impacts to conservation areas.

Considering the above, the application is not likely to be at variance to this principle.

Methodology GIS Databases
- DEC Tenure

(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.

Comments Proposal is not likely to be at variance to this Principle

The application area occurs within a multiple use wetland and some water logging is likely to currently occur. There is a risk that water logging and eutrophication may increase on the property however this risk is minimal and more likely to be associated with the land use and grazing management rather than the proposed clearing (DAFWA 2013).

Due to the lack of slope in the land there is not likely to be any surface water run-off into other areas. There is a risk of increasing salinity levels in the groundwater, however the risk is mainly associated with the resulting land use and grazing management actions, and the likelihood of the proposed clearing impacting on salinity levels is low (DAFWA 2013). A grazing management plan will assist in mitigating any risk of increased salinity levels.

Considering the above, the application is not likely to be at variance to this principle.

Methodology References
- DAFWA (2013)
GIS Databases
- Topographic Contours, Statewide

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

Comments Proposal is not likely to be at variance to this Principle

The area in which the clearing is proposed is already subject to inundation, due to being within a multiple use wetland system. However the proposed clearing is unlikely to cause or exacerbate flooding due to the slight elevation of the application area in relation to surrounding parts of the property, and the retention of mature deep-rooted trees.

Therefore, the application is not likely to be at variance to this principle.

Methodology GIS Databases
- Topographic Contours, Statewide

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

The application is to clear 2.3 hectares of native vegetation for the purpose of grazing and fence lines.

The Commissioner of Soil and Land Conservation (DAFWA 2013) advised that the grazing of livestock on the property without appropriate management is likely to increase salinity levels and the incidence of water logging and eutrophication, which may compromise the integrity of remaining vegetation in the area. Appropriate grazing management, as outlined in Grazing Management Plan (Vincenti 2014), is required on the property to ensure appreciable land degradation does not result.

No public submissions have been received.

The application area occurs within the Gingin Groundwater Area and Swan River System Surface Water Area as proclaimed under the Rights in Water and Irrigation Act 1914.

The Shire of Gingin (2013) advised that clearing for the purpose of grazing is exempt from requiring planning approval under the Shire of Gingin Local Planning Scheme No. 9, and the Shire has no objection to the proposal.

The application area is zoned 'rural' under the Town Planning Scheme Zones.

A small portion of the application area on the eastern side encroaches into the Gingin Brook Waggy! Aboriginal Site of Significance. It is the applicant's responsibility to ensure compliance with any obligations under the Aboriginal Heritage Act 1972.

Methodology References
- Shire of Gingin (2013)

- Vincenti (2014)
- GIS Databases
- Aboriginal Sites of Significance
- RIWI Act, Ground Water Areas
- RIWI Act, Surface Water Areas, Irrigation Districts
- Town Planning Scheme Zones

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DAFWA (2013) Land Degradation Assessment Report and Supporting Information, for Clearing Permit Application CPS 5824/1, provided by the Department of Agriculture and Food Western Australia - Commissioner of Soil and Land Conservation, on 30 October 2013 (DER Ref: A698279).
- DPaW (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed 19/11/2013.
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Shire of Gingin (2013) Advice regarding Clearing Permit Application CPS 5824/1, provided on 17 October 2013 (DER Ref: A685961).
- Vincenti (2014) Grazing Management Plan, 2531 Brand Highway - Lot 4, January 2014 (DER Ref: A712587).