



Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 10160/1
Permit type:	Area permit
Applicant name:	Shaun and Mario Pedrin
Application received:	20/04/2023
Application area:	1.44 hectares of native vegetation
Purpose of clearing:	Cropping and Agriculture
Method of clearing:	Mechanical
Property:	Lot 759 on Deposited Plan 207952
Location (LGA area/s):	Shire of Yilgarn
Localities (suburb/s):	Ghooli

1.2. Description of clearing activities

The vegetation proposed to be cleared is contained within a single contiguous area of 1.44 hectares (see Figure 1, Section 1.5) on lot 759 on Deposited Plan 207952. The purpose of the proposed clearing is to join two paddocks together for better weed control and auto steer of farm machinery (Pedrin, 2023).

1.3. Decision on application

Decision:	Refused
Decision date:	19 May 2024
Decision area:	1.44 hectares of native vegetation as depicted in Section 1.5, below.

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 21 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix A), relevant datasets (see Appendix E.1), the clearing principles set out in Schedule 5 of the EP Act (see Appendix B), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). In particular, the Delegated Officer considered the following:

- clearing may impact on the local population and conservation status of conservation significant fauna species including chuditch (*Dasyurus geoffroii*), malleefowl (*Leipoa ocellata*), tree-stem trapdoor spider (*Idiosoma castellum*) and woma (*Aspidites ramsayi*). The application area exhibits habitat characteristics preferred by these fauna species. A fauna survey over the application area was requested to inform the assessment. The required information was not provided to DWER. Given the circumstances, the Delegated Officer determined

that the extent of impacts on the fauna species remained unclear and therefore the precautionary principle should be applied.

- clearing may impact on the local population and conservation status of conservation significant flora species including *Acacia desertorum* var. *nudipes*, *Lissanthe scabra*, *Prostanthera nanophylla*, *Stylidium choreanthum* and *Verticordia mitodes*. The application area exhibits soil and vegetation characteristics preferred by these flora species. A flora and vegetation survey over the application area was requested to inform the assessment. The required information was not provided to DWER. The Delegated Officer determined that the impact of the proposed clearing on the maintenance and conservation of the conservation significant flora species is likely to be significant and the precautionary principle should be applied,
- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values. A stringent weed and dieback management condition would have been imposed to mitigate this impact.

After consideration of the available information, the Delegated Officer determined the proposed clearing is likely to have long-term adverse impacts on conservation significant flora and fauna species and biodiversity. The Delegated Officer also noted that the applicant did not give confidence that avoidance and minimisation measures have been adequately considered. Given that the applicant did not provide the additional information that was requested during assessment to accurately determine the impacts of the proposed clearing, the Delegated Officer determined to refuse to grant a clearing permit.

1.5. Site map

CPS 10160/1 - Map

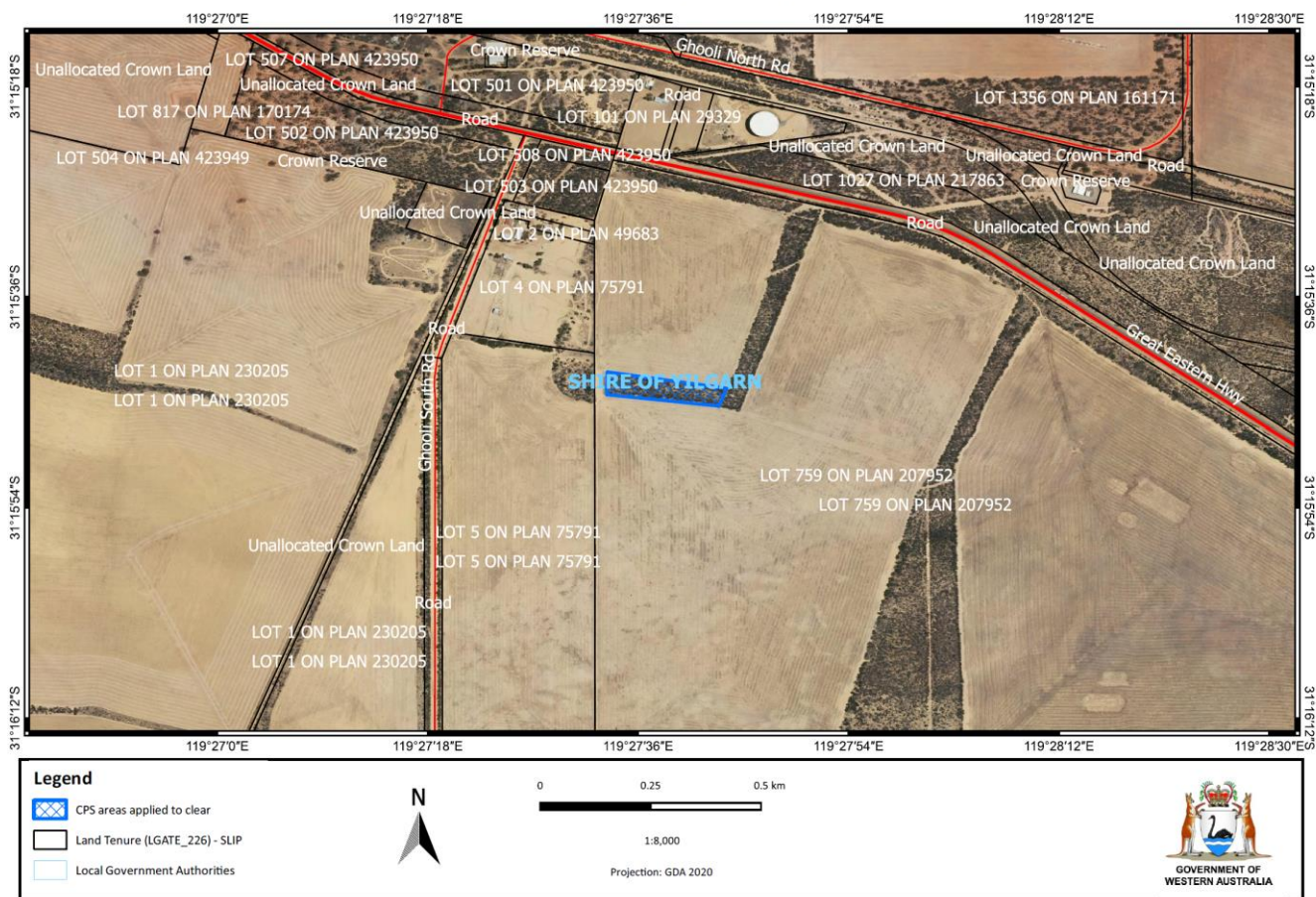


Figure 1 The area crosshatched blue indicates the area applied to be cleared.

2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)

Relevant policies considered during the assessment include:

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

No evidence of avoidance or mitigation measures was provided to support the application.

On the 13 July 2023, the Department requested evidence of efforts taken to avoid and or mitigate significant impacts resulting from the proposed clearing on potential habitat for conservation significant fauna (flora and vegetation and fauna surveys). The applicant has not provided a response to this request.

To date, this information has not been provided, Given this, the Delegated Officer is not satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on biological values (flora and fauna).

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix B) identified that the impacts of the proposed clearing present a risk to biological values (fauna and flora). The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological values (Flora) - Clearing Principle (a)

Assessment

The application area is located within the Coolgardie IBRA bioregion. According to available databases a total of 28 conservation significant flora species have been recorded within the local area (20-kilometre radius of the application area). Of the conservation significant flora species recorded in the local area, the application area is likely to provide suitable and potentially significant habitat for the following species:

- *Acacia desertorum* var. *nudipes* (P3)
- *Lissanthe scabra* (P2)
- *Prostanthera nanophylla* (P3)
- *Stylidium choreanthum* (P3)
- *Verticordia mitodes* (P3)

Acacia desertorum var. *nudipes* (Priority 3) is a dense or open shrub or tree (rarely) that grows approximately 0.6-2 metres in height. It is found between Coolgardie and Yilgarn. It produces yellow flowers from August to October and is commonly found roadside in yellow sand and lateritic gravel along sandplains (FloraBase, 2023). It has been

recorded 22 times within the local area and 27 times within the region (50-kilometre radius), the closest record being 0.64 kilometres from the application area.

Lissanthe scabra (P2) is a rigid, erect, fairly densely branched shrub that grows to approximately one metre in height. It is found between Coolgardie and Yilgarn. It produces white flowers in August and is commonly found in white to orange- brown clay, sandy gravel and loams (Florabase, 2023). Three records have been recorded within the local area and 20 times within the region (50-kilometre radius), with the closest record being 12 kilometres from the application area.

Prostanthera nanophylla (Priority 3) is a small shrub that reaches one metre in height. It is found between Kondinin to Yilgarn, and produces blue-purple-white flowers from August to November and prefers yellow sand over laterite and rocky loam sandplains (FloraBase, 2023). Two records are found in the local area and within the region (50-kilometre radius), with the closest record being 0.28 kilometres from the application area.

Stylidium choreanthum (Priority 3) also known as a dancing trigger plant is a creeping perennial herb that reaches 0.01-0.03 metres in height and 0.3 metres in width. It is found from Yilgarn to Coolgardie and produces pink white flowers from September to November on yellow-white or red sand (FloraBase, 2023). It has been recorded 11 times within the local area and 17 times within the region (50-kilometre radius), with the closest record being 0.63 kilometres from the application area.

Verticordia mitodes (Priority 3) is a small spreading shrub that reaches 0.7 metres in height. It is found between Coolgardie and Yilgarn and produces pink-purple flowers from October to January and found within undulating plains of yellow sand (FloraBase, 2023). It has been recorded twice within the local area and 10 times within the region (50-kilometre radius), with the closest record being 1.42 kilometres from the application area.

The application area exhibits soil and vegetation characteristics preferred by these flora species, so therefore the application area provides suitable habitat for several conservation significant flora species. Based on this preliminary assessment, DWER requested for a targeted flora and vegetation survey over the application area to identify the presence of these flora species. The required information was not provided by the applicant. In the absence of the required information, the assessment has been carried out based on available information and by applying the precautionary principle.

Outcome: Based on the above assessment, the Delegated Officer has determined that significant impacts are likely to occur for conservation significant flora species, which in turn would have significant impact on biodiversity at the local and regional context. In the absence of further clarifying information, it is not possible to have confidence that these impacts can be mitigated and managed to an acceptable level.

3.2.2. Biological values (Fauna) – Clearing Principles (b)

Assessment

The application area is located within the Coolgardie IBRA bioregion. According to available databases a total of seven conservation significant fauna species have been recorded within the local area (20-kilometre radius of the application area). Of the conservation significant fauna species recorded in the local area, the application area is likely to provide suitable and potentially significant habitat for the following species:

- *Idiosoma castellum* (tree-stem trapdoor spider) (P4)
- *Aspidites ramsayi* (woma, southwest subpop.) (P1)
- *Dasyurus geoffroyi* (chuditch, western quoll) (VU)
- *Leipoa ocellata* (malleefowl) (VU)

Tree-stem trapdoor spider

The tree-stem trapdoor spider (TSTS) is a medium sized spider, dark brown to black in colour with large anterior lateral eyes that project beyond the carapace (Burbidge, 2004). Critical habitat for TSTS consists of flood prone depressions and flats which support myrtaceous shrub communities, in particular areas that support Broomhills and Sheoaks in sandy loam soils (Avon, 2007). One record has been recorded within the local area and 123 records within the region (50-kilometre radius), with the closest being 9.6 kilometres from the application area. As the application area exhibits similar soil and habitat type of the TSTS, it represents potential habitat for TSTS.

Woma python (southwest subpopulation)

The woma is a large, rarely observed python found throughout semi-arid central Australia. The woma is a nocturnal species adapted to fossorial living and hunting (Burton, 2013). The species shelters predominately in underground

burrows pre-excavated by burrowing species (rabbits, mice) and occasionally move overland between shelter sites or when actively foraging (Burton, 2013). Woma's are associated with arid, sandy areas favouring open myrtaceous heath on sandplains and dune flats dominated by spinifex. However, they have also been known to occupy shrubby Banksia heathland and cleared farmlands (Burton, 2013). Four records have been recorded within the local area, with the closest being 1.5 kilometres from the application area.

Chuditch

Chuditch used to live in most of continental Australia, except for the tropical north and temperate east. Currently, they can be found in areas dominated by sclerophyll forest, drier woodland, heath, and mallee shrubland, similar to the application area (Van Dyck and Strahan, 2008; National Environmental Science Program Threatened Species Research Hub, 2019). They are carnivorous and nocturnal, feeding on small mammals, birds, lizards, and frogs. The chuditch requires large areas of uncleared vegetation that provide enough food and refuge resources (National Environmental Science Program Threatened Species Research Hub, 2019). There are four records of this species within the local area and 106 records within the region (50-kilometre radius), with the closest record 1.6 kilometres from the application area. Given the application area includes woodland and scrub with a dense understorey, it may provide suitable habitat for chuditch.

Malleefowl

The malleefowl is listed as vulnerable under both the BC Act and EPBC Act. The malleefowl is found principally in the semi-arid to arid zone in shrubland and low woodlands dominated by mallee and associated habitats. In Western Australia, they are also found in some shrublands dominated by acacia, and occasionally in woodlands dominated by eucalypts (Benshemesh, 2007). There are seven records of this species within the local area and 128 records within the region (50-kilometre radius), with the closest record 8.4 kilometres from the application area. As the application area exhibits similar vegetation types, it is likely to contain habitat for malleefowl.

Based on fauna habitat preferences and the habitat currently present in the vegetation applied to be cleared, the application area provides suitable habitat for several conservation significant fauna species. Based on this preliminary assessment, DWER has requested for a targeted fauna survey over the application area to identify the presence of these fauna species and / or suitable habitats for the conservation significant fauna species. The required information has not been provided by the applicant. In the absence of the required information, the assessment has been carried out based on available information and by applying the precautionary principle.

Outcome: Based on the above assessment, the Delegated Officer has determined that significant impacts are likely to occur for significant fauna species as a result of the clearing, and that in the absence of further clarifying information it is not possible to have confidence that these impacts can be mitigated and managed to an acceptable level.

3.3. Relevant planning instruments and other matters

The application was advertised on the Department's website for 21 days and no submissions were received.

The Shire of Yilgarn has provided no comment on the application.

The Delegated Officer noted that the application area is zoned 'Rural/Mining' under the Shire of Yilgarn Local Planning Scheme No. 2 and that the purpose of the proposed clearing is consistent with this zoning. The Delegated Officer noted that no Local Planning Strategy is available for the Shire of Yilgarn.

Several Aboriginal sites of significance have been mapped within the local area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972 (WA)* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

End

Appendix A. Site characteristics

A.1. Site characteristics

The information provided below describes the key characteristics of the area proposed to be cleared and is based on the best information available to DWER at the time of this assessment. This information was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix B.

Characteristic	Details
Local context	<p>The area proposed to be cleared is a 1.44-hectare patch of native vegetation in the intensive land use zone of Western Australia. It is surrounded by rural industry, farms and patches of intact native vegetation.</p> <p>Spatial data indicates the local area (20-kilometre radius from the centre of the area proposed to be cleared) retains approximately 58 per cent of the original native vegetation cover.</p>
Ecological linkage	<p>The application area does not intersect any formally mapped ecological linkages. The application area is only connected to adjacent native vegetation at its eastern boundary so therefore does not function as an informal ecological linkage.</p>
Conservation areas	<p>No conservation areas are mapped within the application area. The closest conservation area is a conservation covenant located 3.2 kilometres southwest of the area proposed to be cleared. Yellowdine Nature Reserve is located 15 kilometres west of the local area.</p>
Vegetation description	<p>Photographs supplied by the applicant indicate the vegetation within the proposed clearing area consists of <i>Acacia</i> and <i>Allocasuarina</i> scrub.</p> <p>Representative photos are available in Appendix D.</p> <p>This is consistent with Beard vegetation association 1413 which is described as:</p> <ul style="list-style-type: none"> Vegetation is predominantly proteaceous with casuarina and acacia scrub heath. Thickets of <i>Grevillea neurophylla</i> occur on ironstone gravelly soils and <i>Acacia resinimarginea</i> on deeper sands. (Shepherd et al, 2001) <p>The above mapped vegetation type retains approximately 76.6 per cent of the original extent (Government of Western Australia, 2019).</p>
Vegetation condition	<p>Photographs supplied by the applicant indicate the vegetation within the proposed clearing area is in Degraded to Good (Keighery, 1994 –) condition, although in the absence of the biological survey information requested by DWER this has not been confirmed.</p> <p>The full Keighery (1994) condition rating scale is provided in Appendix C.</p> <p>Representative photos are available in Appendix D.</p>
Climate and landform	<p>The region experiences a Mediterranean climate with cool winters and hot summers with a mean annual rainfall of 275-325 millimetres.</p>
Soil description	<p>The soil in the application area is mapped as Buladagie 2 Sandplain Subsystem (261Bd_2) which is described as flat and gently undulating yellow lateritic sandplain interspersed with red alkaline duplexes.</p>
Land degradation risk	<p>On the 26 May 2023 the application area was surveyed by the office of the Commissioner of Soil and Land Conservation. A wind erosion hazard was identified, however due to the size of the clearing and management practices in place, it is unlikely to have an appreciable impact on land degradation (CSLC, 2023).</p>
Waterbodies and hydrogeography	<p>The desktop assessment and aerial imagery indicated that no wetlands or waterbodies transect the application area. The closest waterbody to the application area is a non-perennial tributary of the Yilgarn River which is located approximately 658 metres east of the application area.</p>

Characteristic	Details
	<p>The application area does not transect any water resources proclaimed under either the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act), <i>Metropolitan Water Supply Sewerage and Drainage Act 1909</i>, or <i>Country Areas Water Supply Act 1947</i> (CAWS Act).</p> <p>Groundwater salinity within the application area is mapped at 14000-35000 milligrams per total dissolved solids.</p>
Flora	<p>The desktop assessment identified that a total of 28 conservation significant flora species have been recorded in the local area, including three threatened flora species and 25 priority flora species (Western Australian Herbarium, 1998-). None of these existing records occur within the application area, with the closest record being an occurrence of <i>Stylidium choreanthum</i> (P3) approximately 0.6 kilometres from the application area.</p> <p>With consideration for the site characteristics set out above, relevant datasets (see Appendix E) and the habitat preferences of the aforementioned species, the application area is likely to provide significant habitat for conservation significant flora species and impacts to these species required further consideration (see Section 3.2.1).</p>
Ecological communities	<p>The desktop assessment identified that there are no conservation significant ecological communities within the application area. The closest mapped Threatened Ecological Community (TEC) is the Eucalypt Woodlands of the Western Australian Wheatbelt, which is located 20 kilometres of the application area.</p> <p>With consideration for the site characteristics set out above, relevant datasets (see Appendix E) and the habitat preferences of the aforementioned species, the application area is not considered likely to contain vegetation representative of a TEC or Priority Ecological Community (PEC).</p>
Fauna	<p>The desktop assessment identified that a total of seven conservation significant fauna species have been recorded in the local area, including one threatened fauna species, two vulnerable fauna species, two priority fauna species, one other specially protected fauna species, and 1 migratory fauna species (DBCA, 2007-). None of these existing records occur within the application area, with the closest record being an occurrence of Woma (<i>Aspidites ramsayi</i> (southwest subpop.)) approximately 1.5 kilometres from the application area.</p> <p>With consideration for the site characteristics set out above, relevant datasets (see Appendix E) and the habitat preferences of the aforementioned species, the application area is likely to provide significant habitat for conservation significant fauna species and impacts to these species required further consideration (see Section 3.2.2).</p>

A.2. Vegetation extent

	Pre-European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA managed land
IBRA bioregion*					
Coolgardie	12,912,204.46	12648.491.39	97.96	2,114,349.37	16.37
Vegetation association					

	Pre-European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA managed land
Boorabbin 1413 *	514446.16	509349059	99.01	114530.48	22.26
Local area					
20km radius	125,047.93	72,940.87	58.33	-	-

*Government of Western Australia (2019)

A.3. Flora analysis table

With consideration for the site characteristics set out above and relevant datasets (see Appendix E.1), impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
<i>Acacia desertorum</i> var. <i>nudipes</i>	P3	Y	Y	Y	0.6	22	N/A
<i>Lissanthe scabra</i>	P2	Y	Y	N	12	3	N/A
<i>Prostanthera nanophylla</i>	P3	Y	Y	Y	2	2	N/A
<i>Stylidium choreanthum</i>	P3	Y	Y	Y	0.6	11	N/A
<i>Verticordia mitodes</i>	P3	Y	N	Y	6.8	2	N/A

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

A.4. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
<i>Idiosoma castellum</i> (tree-stem trapdoor spider)	P4	Y	Y	9.6	1	N/A
<i>Aspidites ramsayi</i> (woma, southwest subpop.)	P1	Y	Y	1.5	4	N/A
<i>Dasyurus geoffroyi</i> (chuditch, western quoll)	VU	Y	Y	1.6	4	N/A
<i>Leipoa ocellata</i> (malleefowl)	VU	Y	Y	8.4	7	N/A

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

A.5. Ecological community analysis table

Community name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Eucalypt woodlands of the Western Australian Wheatbelt	P3	Y	Y	Y	20	1	N/A

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

Community name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
----------------	---------------------	----------------------------------	---------------------------------	---------------------------	---	---------------------------------	---

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p><u>Principle (a):</u> <i>“Native vegetation should not be cleared if it comprises a high level of biodiversity.”</i></p> <p><u>Assessment:</u> The application area may contain habitat for conservation significant fauna species. It is also likely to contain conservation significant flora species. In the absence of a flora, vegetation and fauna survey, it is considered likely that the proposed clearing is at variance with this principle.</p>	At variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p><u>Principle (b):</u> <i>“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.”</i></p> <p><u>Assessment:</u> Desktop analysis indicates that conservation significant fauna species are likely to be present at the proposed clearing area. In the absence of a fauna survey, the proposed clearing is likely to be at variance to this principle.</p>	At variance	Yes <i>Refer to Section 3.2.2, above.</i>
<p><u>Principle (c):</u> <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p><u>Assessment:</u> The area proposed to be cleared is unlikely to contain habitat for flora species listed under the BC Act.</p>	Not likely to be at variance	No
<p><u>Principle (d):</u> <i>“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.”</i></p> <p><u>Assessment:</u> The area proposed to be cleared does not contains species that can indicate a threatened ecological community.</p>	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u> The extent of the mapped vegetation type in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia. The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.</p>	Not at variance	No
<p><u>Principle (h):</u> <i>“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.”</i></p> <p><u>Assessment:</u> Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.</p>	Not likely to be at variance	No
Environmental value: land and water resources		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u> Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact on- or off-site hydrology and water quality.</p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (g):</u> “Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</p> <p><u>Assessment:</u> The mapped soils are moderately susceptible to wind erosion. Noting the extent of the application area and the condition of the vegetation the proposed clearing is not likely to have an appreciable impact on land degradation.</p>	Not likely to be at variance	No
<p><u>Principle (i):</u> “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.”</p> <p><u>Assessment:</u> Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact surface or ground water quality.</p>	Not at variance	No
<p><u>Principle (j):</u> “Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</p> <p><u>Assessment:</u> The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding.</p> <p>Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to contribute to waterlogging.</p>	Not at variance	No

Appendix C. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation’s ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from

Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.

Condition	Description
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Appendix D. Photographs of the vegetation proposed to be cleared (Pedrin, 2023)



Figure 2. Photograph of vegetation proposed to be cleared (Pedrin, 2023)



Figure 3. Photograph of vegetation proposed to be cleared (Pedrin, 2023)



Figure 4. Photograph of vegetation proposed to be cleared (Pedrin, 2023)

Appendix E. Sources of information

E.1. GIS databases

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

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)

- Soil Landscape Mapping – Best Available
- Soil Landscape Mapping – Systems
- Wheatbelt Wetlands Stage 1 (DBCA-021)

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

E.2. References

- Avon Catchment Council (2007) Tree-stem Trapdoor Spider (*Aganippe castellum*) Conservation Plan No. #. Avon Catchment Council, Western Australia.
- Benshemesh, J (2007) National Recovery Plan for Malleefowl. Department for Environment and Heritage, South Australia.
- Burbidge, A. (2004) *Threatened animals of Western Australia*. Department of Conservation and Land Management, Western Australia.
- Burton, J.M. (2013) *Arboreality, excavation and active foraging: novel observations of radio tracked woma pythons *Aspidites ramsayi**. *Memoirs of the Queensland Museum |Nature*, 56(2): 313-329.
- Commissioner of Soil and Land Conservation (CSLC) (2023) *Land Degradation Advice and Assessment Report for clearing permit application CPS 10160/1*, received 2 June 2023. Department of Primary Industries and Regional Development, Western Australia (DWER Ref: DWERVT12533).
- Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation 2001-2005*, Canberra.
- Department of Environment and Conservation (2012). *Chuditch (*Dasyurus geoffroyi*) National Recovery Plan. Wildlife Management Program No. 54*. Department of Environment and Conservation, Western Australia
- Department of Environment Regulation (DER) (2013). *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf.
- Department of Primary Industries and Regional Development (DPIRD) (2019). *NRInfo Digital Mapping. Department of Primary Industries and Regional Development*. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/> (accessed June 2023).
- Department of Water and Environmental Regulation (DWER) (2019). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.PDF.
- Government of Western Australia (2019) *2018 Australasian Virtual Herbarium*. WA Department of Biodiversity, Conservation and Attractions, Perth, [Record: PERTH 4190726 | Occurrence record | The Australasian Virtual Herbarium](#) (Accessed 22 June 2023)
- 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. <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.

- National Environmental Science Program Threatened Species Research Hub (2019) Threatened Species Strategy Year 3 Scorecard- Chuditch. Australian Government, Canberra. Available from <http://www.environment.gov.au/biodiversity/threatened/species/20-mammals-by2020/western-quoll>
- 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.
- Pedrin, S and M (2023) *Clearing permit application CPS 10160/1, and supporting information* received 20 April 2023 (DWER Ref: DWERT12533).
- 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.
- Western Australian Herbarium (1998-). *FloraBase - the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dpaw.wa.gov.au/> (Accessed 22 June 2023)