



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 9642/1
Permit Holder:	Mr Mark Graham
Duration of Permit:	From 07/08/2022 to 07/08/2027

The permit holder is authorised to clear *native vegetation* subject to the following conditions of this permit.

PART I – CLEARING AUTHORISED

1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of providing an electrical connection to a residential home

2. Land on which clearing is to be done

Unnamed road reserve, (PIN 11509760), Uduc

3. Clearing authorised

The permit holder must not clear more than 0.022 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

4. Clearing not authorised (tree diameter)

The permit holder must not clear standing trees that have a diameter (measured at 130 centimetres from the base of the tree) of:

- (a) 30 centimetres or greater, for *Eucalyptus salmonophloia* or *Eucalyptus wandoo*;
or
- (b) 50 centimetres or greater, for all other species.

PART II – MANAGEMENT CONDITIONS

5. 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.

6. 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.

PART III - RECORD KEEPING AND REPORTING

7. 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	<ol 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); and(e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 5; and(f) actions taken to minimise the risk of the introduction and spread of <i>weeds</i> and <i>dieback</i> in accordance with condition 6.

8. Reporting

The permit holder must provide to the *CEO* the records required under condition 7 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.
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)
fill	means material used to increase the ground level, or to fill a depression.
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



Jessica Burton

A/MANAGER

NATIVE VEGETATION REGULATION

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

14 July 2022

Schedule 1

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

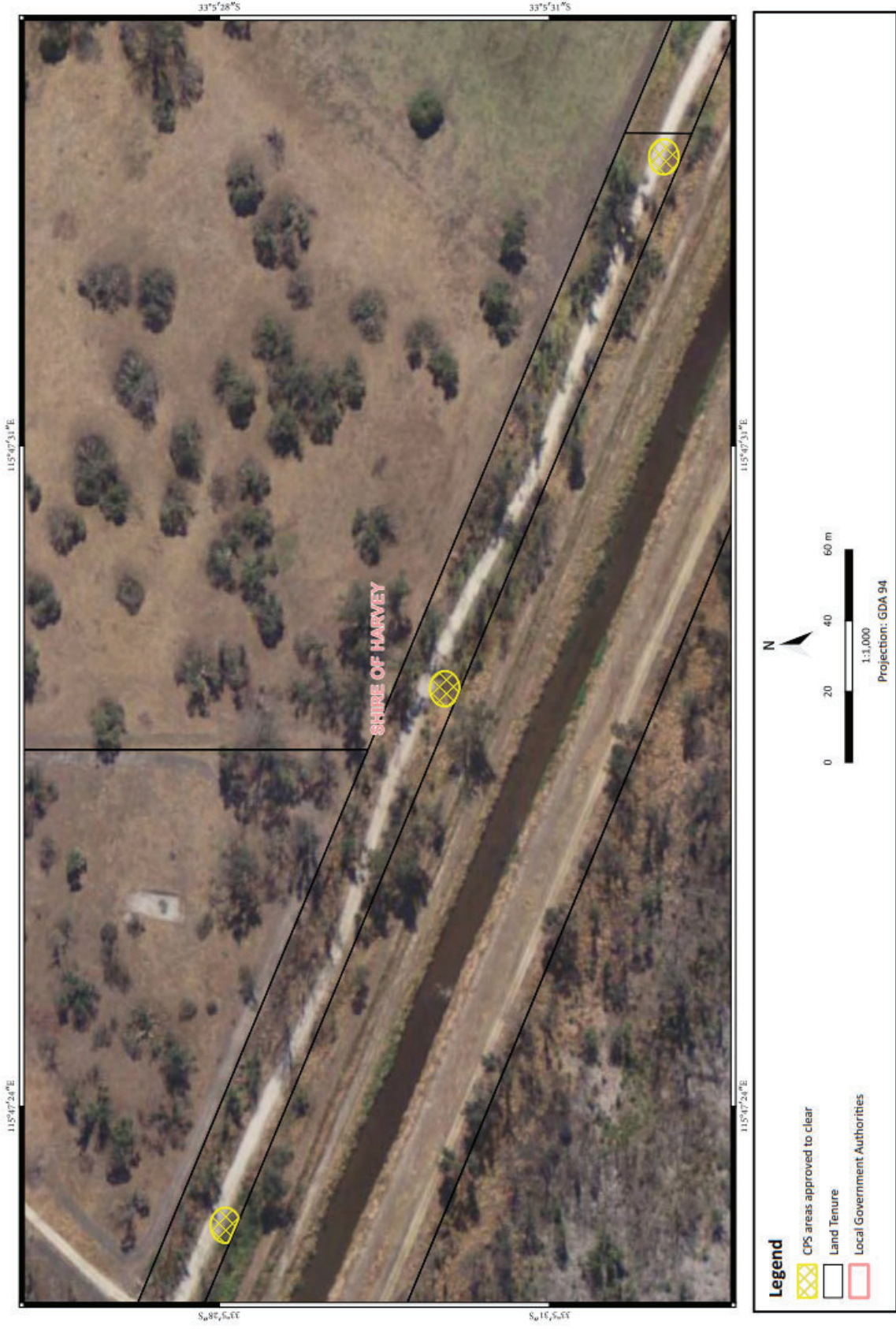


Figure 1: Map of the boundary of the area within which clearing may occur



Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 9642/1
Permit type:	Purpose permit
Applicant name:	Mr Mark Graham
Application received:	3 March 2022
Application area:	0.41 hectares of native vegetation
Purpose of clearing:	Enabling an electrical connection to a residential home
Method of clearing:	Cutting
Property:	Unnamed road reserve, (PIN 11509760)
Location (LGA area/s):	Shire of Harvey
Localities (suburb/s):	Uduc

1.2. Description of clearing activities

The vegetation proposed to be cleared is contained within a single contiguous area (see Figure 1, Section 1.5) consisting of three small locations within this area. The application is to clear vegetation to enable the installation of power infrastructure to enable an electrical connection to a residential home.

The application was revised during the assessment process, in response to information received from the Shire of Harvey and in consultation with the applicant. The changes included a reduction in the clearing area from a broader linear strip of 0.41 hectares to a narrowed area of a total 0.022 hectares which supports only the clearing necessary for the installation of power poles.

1.3. Decision on application

Decision:	Granted
Decision date:	14 July 2022
Decision area:	0.022 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 (for the proposed clearing of 0.3 hectares) and no submissions were received. The application area was increased by an additional area of 0.11 hectares after this initial advertising period and the application was advertised for an additional 7 days, no submissions were received. The application was reduced to 0.022 hectares after further discussion between the Shire of Harvey, the applicant and DWER.

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).

The assessment identified that the proposed clearing will result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing is unlikely to lead to appreciable land degradation or have long-term adverse impacts on the mapped wetland or ecological communities and can be minimised and managed to unlikely lead to an unacceptable risk to environmental values.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing
- take hygiene steps to minimise the risk of the introduction and spread of weeds
- no clearing of large trees (those that are potential habitat for black cockatoos)

1.5. Site map



Figure 1 Map of the application area

The area crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.

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)

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

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values. The proposed clearing is only to the extent necessary to enable the construction of the electrical connection to the house.

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 the impacts of the proposed clearing are limited and able to be managed to be environmentally acceptable with standard avoid and minimise and hygiene management conditions.

3.2.1. Biological values - Clearing Principles (a), (b), (c) and (d)

Within the local area, 25 conservation significant flora species have been recorded, including:

- six Priority 4 (P4) species
- 12 P3 species
- one P2 species
- three Threatened species

Noting the composition of the vegetation within the application area within the photographs provided (Appendix D), the historical disturbance as shown in aerial imagery (Appendix D) and the condition of the vegetation, the application area is not likely to provide habitat for conservation significant flora.

Within the local area 34 conservation significant fauna species have been recorded. Of these recordings, 13 species are avian species found within wetland/river environments not represented within the application area and a further three species are fish/water invertebrate and marine species.

Three species of conservation significant black cockatoo have been recorded within the local area: Baudin's cockatoo, Carnaby's Cockatoo and Forest red-tail black cockatoo. Given the of significant foraging habitat for these species available within the highly vegetated local area, the loss of 0.022 hectares of vegetation in degraded condition is not likely to be significant for these species given vegetation in better condition is located within the adjacent areas. The application area does contain large trees (breeding trees) although some trees can be seen within the photographs provided. The applicant is committed to not clearing large trees. This commitment has been secured within the permit conditions.

The vegetation within the application area may provide habitat for smaller species that have been recorded within the local area:

- Coastal Plains skink (P3)
- Perth slider, lined skink (P3)
- Quenda, southwestern brown bandicoot (P4)

The loss of 0.022 hectares of vegetation in degraded condition is not likely to be significant for these species given vegetation in better condition is located within the adjacent areas.

The application area is within a mapped occurrence of Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region, the photographs provided (Appendix D) show the vegetation within the application area is absent of any of the key indicators of this community and is not representative of the community.

Conclusion

For the reasons set out above, it is considered that the impact of the proposed clearing is not likely to impact on the mapped ecological community or have significant impact on conservation significant flora or fauna species.

Conditions

A permit to clear has been conditioned to not authorise the clearing of large trees as a precautionary measure to protect trees that may form future breeding trees for species of black cockatoos.

No additional conditions required to manage impacts to biological values as addressed under Clearing Principles (a), (b), (c) and (d) specifically. The addition of an avoidance and minimisation condition to a permit to clear will assist in reducing overall impacts from the proposed clearing.

3.2.2. Land and water resources - Clearing Principles (i) and (f)

Assessment

The application area is located within two mapped wetlands: a conservation category wetland and a multiple use wetland. The wetlands have the following descriptions and objectives:

Category	Description	Management objective
Conservation	Wetlands which support a high level of attributes and functions.	Highest priority wetlands. Objective is to preserve and protect the existing conservation values of the wetlands through various mechanisms including: <ul style="list-style-type: none">• reservation in national parks, crown reserves and State-owned land• protection under Environmental Protection Policies• wetland covenanting by landowners. No development or clearing is considered appropriate. These are the most valuable wetlands and any activity that may lead to further loss or degradation is inappropriate.
Multiple use	Wetlands with few remaining important attributes and functions	Use, development and management should be considered in the context of ecologically sustainable development and best management practice catchment planning through landcare.

Figure 2 below shows the application areas intersection with the two mapped wetland types (multiple use is mapped in blue) and conservation category (mapped in green). It is noted that the construction of the Harvey River Diversion Drain intersects the mapped wetlands. Noting the extent of the clearing, the condition of the vegetation in the application area, its alignment with an unsealed road and the presence of the significant diversion drain, the proposed clearing is not likely to impact significant wetland values.



Figure 2: The application area in relation to the mapped wetland values

The flora species occurring within the application area include *Melaleuca* and *Pteridium* species with a weedy understory comprising, weeds and non-native grasses. *Melaleuca* species are often associated with winter wet areas but are also adapted to drier soil types. The vegetation within the application area is not considered riparian.

Conclusion

For the reasons set out above, it is considered that the impact of the proposed clearing is not likely to include vegetation growing in association with a watercourse and not considered likely to impact the mapped wetland values.

Conditions

No conditions required to manage impacts to wetlands or riparian vegetation as addressed under Clearing Principles (i) and (f) specifically. The addition of an avoidance and minimisation condition to a permit to clear will assist in reducing overall impacts from the proposed clearing.

3.3. Relevant planning instruments and other matters

The Shire of Harvey advised DWER that local government approvals are not required for the proposed clearing and only supported the clearing and/or pruning of vegetation that is absolutely critical for the installation of the power poles.

No Aboriginal sites of significance have been mapped within the application 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

Characteristic	Details
Local context	<p>The area proposed to be cleared is three small circular areas of native vegetation in the intensive land use zone of Western Australia. It is adjacent to a road reserve and private properties and within close proximity to the Harvey River Diversion Drain.</p> <p>Spatial data indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 28 per cent of the original native vegetation cover.</p>
Ecological linkage	The application area is not within any mapped ecological linkages.
Conservation areas	The application area is located approximately 115 meters east of a part of the Myalup state forest (Lot 6307 on Plan 39948)
Vegetation description	<p>Photographs provided by the applicant indicate the vegetation within the proposed clearing area consists of <i>Melaleuca</i> sp. and <i>Pteridium</i> sp. over weeds and grasses. Representative photos are available in Appendix D.</p> <p>This is inconsistent with the mapped vegetation type(s):</p> <ul style="list-style-type: none"> (Bassendean Complex-Central and South, which is described Vegetation ranges from woodland of <i>Eucalyptus marginata</i> (Jarrah) - <i>Allocasuarina fraseriana</i> (Sheoak) - Banksia species to low woodland of <i>Melaleuca</i> species, and sedgeland on the moister sites. This area includes the transition of <i>Eucalyptus marginata</i> (Jarrah) to <i>Eucalyptus todtiana</i> (Pricklybark) in the vicinity of Perth. <p>The mapped vegetation type retains approximately 26.9 per cent of the original extent (Government of Western Australia, 2019).</p>
Vegetation condition	<p>Photographs provided by the indicate the vegetation within the proposed clearing area is in degraded (Keighery, 1994) condition, described as:</p> <p>Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management</p> <p>The full Keighery (1994) condition rating scale is provided in Appendix C Representative photos are available in Appendix D.</p>
Climate and landform	The application area is located within a flat landscape with no mapped change in topography. The annual average rainfall is 865.6 millimetres as taken from the nearest site in Harvey (BOM, 2022)
Soil description	<p>The soil is mapped as the following soil types:</p> <ul style="list-style-type: none"> Bassendean B3a Phase, which is described as: Broad depression and narrow swales between sand ridges with poor to very poorly drained grey and brown sands, with an iron-organic (or siliceous) hardpan at generally less than one metre. Bassendean B6 Phase, which is described as: Sandplain and broad extremely low rises with imperfectly drained deep or very deep grey siliceous sands.
Land degradation risk	The two mapped soil types within the application area have a low risk of water erosion, salinity and flood risk and a medium to high risk of water logging and phosphorus export risk. Two of the mapped types have a medium to high risk of wind erosion.

Characteristic	Details
Waterbodies	The desktop assessment and aerial imagery indicated that the application area is approximately 30 meters from the Harvey River Diversion Drain and is within a mapped conservation category wetland and a multiple use wetland.
Hydrogeography	The application area is within the South West Coastal Groundwater Area proclaimed under the RIWI Act 1914.
Flora	Available databases show 25 conservation significant flora species have been recorded within the local area, the nearest of which is recorded approximately 0.8 kilometres away and is a Priority 3 species, <i>Boronia capitata</i> subsp. <i>gracilis</i> .
Ecological communities	The application area is mapped as Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region.
Fauna	According to available databases, 34 conservation significant fauna have been recorded within the local area. The most frequent occurring is Western ringtail possum, and the closest occurrence is of Carnaby's cockatoo and forest redtail black cockatoo located approximately 570 meters from the application area.

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*					
Swan Coastal Plain	1,501,221.93	579,813.47	38.62	222,916.97	14.85
Vegetation complex**					
Bassendean Complex-Central and South	87,476.26	23,508.66	26.87	4,377.36	5.00
Local area					
10km radius			28.10	-	-

*Government of Western Australia (2019a)

**Government of Western Australia (2019b)

A.3. Land degradation risk table

Risk categories	Bassendean B3a Phase
Wind erosion	<3% 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
Salinity	<3% of map unit has a moderate to high salinity risk or is presently saline
Subsurface Acidification	>70% of map unit has a high subsurface acidification risk or is presently acid
Flood risk	10-30% of the map unit has a moderate to high flood risk
Water logging	>70% of map unit has a moderate to very high waterlogging risk
Phosphorus export risk	>70% of map unit has a high to extreme phosphorus export risk

Risk categories	Bassendean B6 Phase
Wind erosion	>70% 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
Salinity	<3% of map unit has a moderate to high salinity risk or is presently saline
Subsurface Acidification	>70% 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 hazard
Water logging	30-50% of map unit has a moderate to very high waterlogging risk
Phosphorus export risk	>70% of map unit has a high to extreme phosphorus export risk

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p>Principle (a): <i>“Native vegetation should not be cleared if it comprises a high level of biodiversity.”</i></p> <p>Assessment: The area proposed to be cleared does not contain locally or regionally significant flora, fauna, habitats, assemblages of plants.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p>Principle (b): <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>Assessment: The area proposed to be cleared does not contain foraging, roosting, breeding, critical, significant habitat for conservation significant fauna.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p>Principle (c): <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p>Assessment: 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	Yes <i>Refer to Section 3.2.1, above.</i>
<p>Principle (d): <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>Assessment: The area proposed to be cleared is mapped as Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region, a Threatened Ecological Community under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>. The photographs provided by the applicant show vegetation within the application area is not representative of this community.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.1, above</i>

Assessment against the clearing principles	Variance level	Is further consideration required?
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></p> <p>The extent of the mapped vegetation type and the native vegetation in the local area is inconsistent 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> <p>Noting the composition of the vegetation proposed to be cleared is not representative of the mapped vegetation types and does not provide significant habitat for flora or fauna species, the vegetation is not considered significant as a remnant of native vegetation in an area that has been extensively cleared.</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 adjacent 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> No water courses are recorded within the application area. The closest watercourse is the Harvey River Diversion Drain which is recorded approximately 30 meters from the application area. The application area is within a mapped conservation category wetland and a multiple use wetland.</p>	May be at variance	Yes <i>Refer to Section 3.2.2, above.</i>
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u></p> <p>The mapped soils are moderately to highly susceptible to subsurface acidification, water logging, phosphorus export risk and 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> <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.”</i></p> <p><u>Assessment:</u></p> <p>Given two wetlands are recorded as intersecting the application area, the proposed clearing may impact surface or ground water quality.</p>	May be at variance	Yes <i>Refer to Section 3.2.2, above.</i>
<p><u>Principle (j):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</i></p> <p><u>Assessment:</u></p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p>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 the presence of a man made drain within approximately 33 meters of the application area and the mapped soil types in the application area, the proposed clearing is unlikely to contribute to waterlogging.</p>		

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.
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



Figure 3: Vegetation within the application area (Applicant, 2022)



Figure 4: Vegetation within the application area (Applicant, 2022)



Figure 5: Vegetation within the application area (Applicant, 2022)



Figure 6: Aerial imagery of the application area 2013 (Landgate, 2013) (Bunbury 2031)



Figure 7: Aerial imagery of the application area 2016 (Landgate, 2016) (Alcoa Forest Audit))



Figure 8: Aerial imagery of the application area 2017 (Landgate, 2017) (Bunbury 2031)

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)
- 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)
- Offsets Register – Offsets (DWER-078)
- 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

Applicant (2022) *Clearing permit application CPS 9642/1*, received 3 March 2022 (DWER Ref: DWERDT571651).

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