



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 8767/1
File Number: DWERVT5038
Duration of Permit: From 26 July 2020 to 26 July 2026

PERMIT HOLDER

Bamess Holdings Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 11219 on Plan 204912, Jardee
Lot 8 on Plan 41879, Jardee

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 2.283 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8767/1a.

CONDITIONS

1. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

2. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in 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.

3. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the 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 *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.

4. Water erosion management

- (a) The permit holder must commence dam construction activities no later than three (3) months after undertaking the authorised clearing activities to reduce the potential for water erosion.
- (b) The permit holder must not clear any native vegetation between 1 May and 30 September to reduce the potential for water erosion.

5. Revegetation requirements

The permit holder shall take the following actions for the purpose of *revegetation*:

- (a) preparing the *revegetation* area cross hatched in green on the attached Plan 8767/1b by:
 - (i) undertaking *weed* control;
 - (ii) ripping the soil; and
 - (iii) constructing or ensuring the good working order of a fence fully enclosing the areas cross-hatched red on the attached Plan 8767/1a.
- (b) retain the vegetative material and topsoil removed by clearing authorised under this permit and lay the vegetative material and topsoil in the areas cross-hatched green on the attached Plan 8767/1b;
- (c) prior to January 2022, commence *revegetating* the areas cross-hatched green on Plan 8767/1b, by way of:
 - (i) deliberately planting tube stock and salvaged native vegetation that will result in the achievement of the completion criteria outlined in condition 5(g);
 - (ii) ensuring only endemic species are used to *revegetate* the area;
 - (iii) installing tree guards around the tube stock; and
 - (iv) installing a minimum of six (6) 10 x 10 metre *quadrat* monitoring sites.
- (d) implement hygiene protocols by cleaning earth-moving machinery of soil and vegetation prior to entering and leaving the site;
- (e) undertake *weed* control activities on an 'as needs' basis to maintain a minimum 20 per cent *weed* free state by the end of the project maintenance period;
- (f) undertake supplementary watering on an 'as needs' basis to ensure tube stock survival rates achieve the criteria outlined in condition 5(g);
- (g) achieve the completion criteria specified below after the four-year monitoring period for areas *revegetated* under this permit; and

Criterion	Aspect	Scale	Completion Criteria	Monitoring
1	Per cent <i>weed</i> cover	Average of quadrat data	<20 per cent <i>weed</i> cover	Annually (April)
2	Vegetation density	Average of quadrat data	15 stems per 100 m ²	Annually (April)
3	Vegetation diversity	Average of quadrat data	5 species per 100 m ²	Annually (April)

- (h) undertake remedial actions for areas *revegetated* where monitoring indicates that *revegetation* has not met the completion criteria, outlined in 5(g), including:
 - (i) *revegetate* the area by deliberately planting native vegetation that will result in the minimum target in condition 5(g) and ensuring only local species are used;
 - (ii) undertake further *weed* control activities;
 - (iii) undertake supplementary watering; and
 - (iv) annual monitoring of each *revegetated* site through the monitoring sites installed under condition 5(c)(iv), until the completion criteria, outlined in condition 5(g) are met.

6. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) 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 or decimal degrees;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 2 of this Permit;
- (e) actions taken to minimise the risk of the introduction and spread of *dieback* and *weeds* in accordance with condition 3 of this Permit; and

- (f) in relation to the *revegetation* of area pursuant to condition 5
 - (i) a description of the *revegetation* activities;
 - (ii) the size of the area *revegetated*;
 - (iii) the date(s) on which the area *revegetation* was undertaken; and
 - (iv) actions taken in accordance with condition 5(h).

7. Reporting

The Permit Holder must provide to the *CEO* the records required under condition 6 of this Permit, when requested by the *CEO*.

DEFINITIONS

The following meanings are given to terms used in this Permit:

CEO: means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

dieback means the effect of *Phytophthora* species on native vegetation;

fill means material used to increase the ground level, or fill a hollow;


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;

revegetate / vegetated / revegetation means the re-establishment of a cover of local provenance native vegetation in an area using methods such as natural regeneration, direct seeding and/or planting, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.

quadrat means a sample plot established for the purpose of data collection and monitoring vegetation characteristics, for example species composition, structure, density and condition;

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.


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Ryan Mincham
MANAGER
NATIVE VEGETATION REGULATION





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

3 July 2020

Plan 8767/1a



Legend

-  CPS area subject to fencing conditions
 -  CPS areas approved to clear
 -  Road Centrelines
 -  Local Government Authority - LGATE-233
- Cadastral - LGATE 218



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Officer delegated under section 20 of the
 Environmental Protection Act 1986



GOVERNMENT OF
 WESTERN AUSTRALIA






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Plan 8767/1b



Legend

-  CPS area subject to revegetation conditions
-  CPS areas approved to clear
-  Road Centrelines
-  Cadastre - LGATE 218
-  Local Government Authority - LGATE-233




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GOVERNMENT OF WESTERN AUSTRALIA



Clearing Permit Decision Report

1. Application details and outcome

1.1. Permit application details

Permit number:	CPS 8767/1
Permit type:	Area permit
Applicant name:	Bamess Holdings Pty Ltd
Application received:	17 December 2019
Application area:	2.283 hectares (ha)
Purpose of clearing:	Dam Construction
Method of clearing:	Mechanical Removal
Property:	Lot 11219 on Plan 204912, Jardee Lot 8 on Plan 41879, Jardee
Location (LGA area/s):	Shire of Manjimup
Localities (suburb/s):	Jardee

1.2. Description of clearing activities

The vegetation applied to be cleared is a continuous area of predominately degraded and planted vegetation, although native shrubs are regenerating in the drainage line (see Figure 1, Section 1.5).

1.3. Decision on application and key considerations

Decision:	Granted
Decision date:	3 July 2020
Decision area:	2.283 ha of native, as depicted in Section 1.5, below.

1.4. Reasons for decision

This clearing permit application was made in accordance with section 51E of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Water and Environmental Regulation (DWER) on 17 December 2019. DWER advertised the application for public comment and no submissions were received.

In undertaking their assessment, and in accordance with section 51O of the EP Act, the Delegated Officer has given consideration to the Clearing Principles in Schedule 5 of the EP Act (see Appendix C), relevant planning instruments, and any other pertinent matters they deemed relevant to the assessment (see Section 3).

In particular, the Delegated Officer has determined that:

- the proposed clearing reduces the area of native vegetation within the land holding below the 10 per cent threshold outlined in the *Country Areas Water Supply Act 1947* (CAWS Act), however the revegetation proposed satisfies the exceptional circumstances constraint under Section 12C(3) of the CAWS Act.
- There is a risk of land and water quality degradation, which can be suitable mitigated with permit conditions stipulating times in which the clearing can be undertaken (see Section 3)

In determining to grant a clearing permit subject to conditions, the Delegated Officer found that the proposed clearing is not likely to lead to an unacceptable risk to the environment.

1.5. Site map

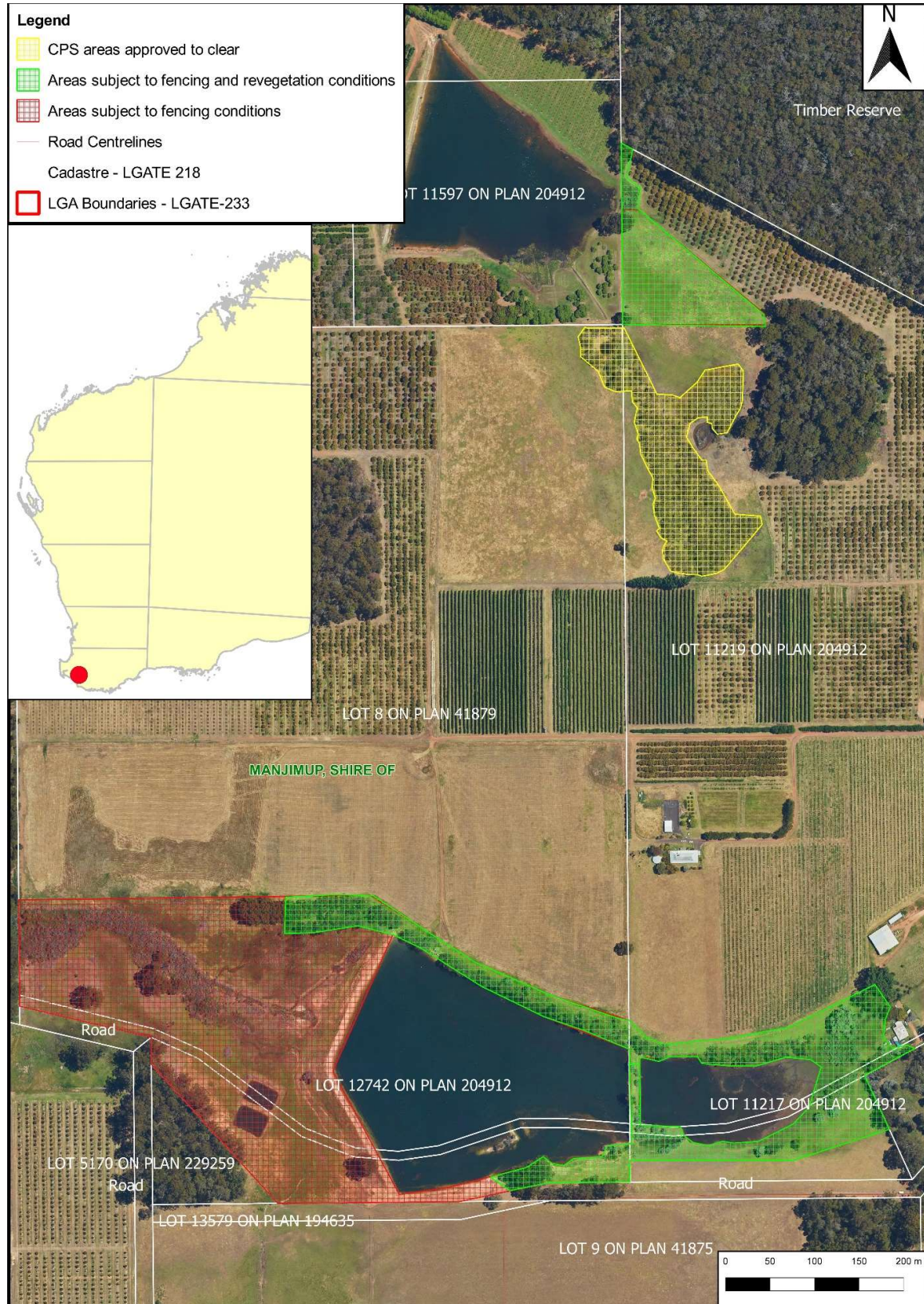


Figure 1. Map of the application area. The area cross-hatched yellow indicates the area authorised to be cleared under the granted clearing permit. The areas cross-hatched red indicates areas within which fencing conditions apply; the areas cross-hatched green indicate areas in which revegetation conditions apply.

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 1.3), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

1. the precautionary principle;
2. the principle of intergenerational equity;
3. the principle of the conservation of biological diversity and ecological integrity; and
4. the polluter pays principle

Other legislation of relevance for this assessment include:

- *Country Areas Water Supply Act 1947* (WA) (CAWS Act)
- *Rights in Water and Irrigation Act 1914* (WA) (RiWI Act)
- *Planning and Development Act 2005* (WA) (P&D Act)
- *Soil and Land Conservation Act 1945* (WA)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)
- *A guide to preparing revegetation plans for clearing permits* (DWER, November 2016)
- *Water Quality Protection Note No. 53 'Dam Construction and Operation in Rural Areas'* (DWER, September 2019)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

Evidence was submitted by the applicant, demonstrating that the area was chosen based on the predominately non-native vegetation, and that the proposed clearing area has been previously cleared. The applicant advised that the proposed clearing area is the only suitable site to support the farming activities on the property (specifically, dam construction) and noted other areas of native vegetation on the property are subject to an Agreement to Reserve. This adequately demonstrated that all reasonable efforts had been taken to avoid and minimise potential impacts of the clearing on environmental values.

3.2. Assessment of environmental impacts

In assessing the application in accordance with section 51O of the EP Act, the Delegated Officer has examined the application and site characteristics (Appendix B) and considered whether the clearing poses a risk to environmental values. The assessment against the Clearing Principles is contained in Appendix C.

This assessment identified that the clearing may pose a risk to the environmental values of land and water resources, and that these required further consideration. The detailed consideration and assessment of the clearing impacts is provided below. Where the assessment found that the clearing presents an unacceptable risk to environmental values, conditions aimed at controlling and/or ameliorating the impacts have been imposed under sections 51H and 51I of the EP Act. These are also identified below.

3.2.1. Environmental value: land and water resources – Clearing Principles (f), (g), (i) and (j)

Assessment: The proposed clearing area falls within the CAWS Act gazetted Warren River Water Reserve. CAWS Act native vegetation clearing controls are in place within the area to prevent the salinisation of water resources, with one-tenth of the land holding required to remain under native vegetation. The proposed clearing will reduce the application area from approximately 10 per cent native vegetation cover to 8 per cent, and as such the application would not typically be supported. However, if the land owner agreed to establish an equivalent area of native revegetation offset at a rate of 2:1 (4.56 ha) of a type and in a location approved by DWER, this would satisfy the exceptional circumstances constraint under Section 12C(3) of the CAWS Act and ensure that greater than one-tenth native vegetation remained on the property (DWER, 2020). A revegetation plan has been prepared by the applicant which satisfies these requirements.

Although the mapped risk of water erosion and advice provided by the Commissioner of Soil and Land Conservation indicate that the risk of land degradation is low, the application area lies within a drainage line in an area that experiences high yearly rainfall in the winter months. As such clearing during these months may lead to land degradation and sedimentation of waterways.

Outcome: Based on the above assessment, the Delegated Officer has determined that the proposed clearing is considered **acceptable subject to relevant conditions (see below)** in relation to this environmental value.

Conditions: To address the above impacts, the following conditions will be added to the permit:

- Revegetation requirements as per the Revegetation Plan provided by the applicant – this condition will satisfy CAWS Act requirements for the land holding; and
- Water erosion management – these conditions ensure no clearing is undertaken during times of high rainfall and that the land is not left cleared for an extended period prior to works commencement.

3.3. Relevant planning instruments and other matters

Other relevant authorisations required for the proposed land use typically include:

- Development approval under the *Planning and Development Act 2005* (issued by the Shire of Manjimup).
- Licence to abstract water under the *Rights in Water and Irrigation Act 1914* (RIWI Act).
- Permit to interfere with bed and banks under the RIWI Act.

The applicant has been advised that the proposed development is exempt from regulation under Division 1 Part 3 Clause 5 of the RIWI Act (DWER, 2019).

The Shire of Manjimup have issued a development approval for the dam construction subject to a number of conditions (Shire of Manjimup 2019):

- All parts of the dam approved shall be setback a minimum of 10 metres from boundaries to the satisfaction of the Shire of Manjimup;
- Prior to commencement of works associated with the dam, the applicant is to apply for approval for boundary realignment from the Western Australian Planning Commission to ensure that the resultant dam will be wholly contained within a single title;
- Finalisation of the above condition is to be completed within 12 months of the practical completion of the dam; and
- All pumps and ancillary equipment and structure being setback from the property boundaries in accordance with the requirements of the Shire of Manjimup Local Planning Scheme No 4.

The Shire of Manjimup also advised the applicant to refer to the *'Water Quality Protection Note No 53 – Dam Construction and Operation in Rural Areas'* to minimise the risk of impacts of land degradation and water quality impacts downstream.

An Agreement to Reserve (ATR) under the *Soil and Land Conservation Act 1945* was lodged for the protection of 10% of the thinned native vegetation on the property at the time in accordance with the CAWS Act guidelines and Part IIA of the CAWS Act 1947. The native vegetation proposed to be cleared was not subject to the ATR (CSLC, 2019).

No Aboriginal Sites of Significance have been recorded in the application area; the closest registered site is located approximately 5 km from 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.

Appendix A – Additional information provided by applicant

Summary of comments	Consideration of comment
Shire of Manjimup Development Approval for Dam – Lot 11219, 358 Churches Road Jardee Photographs of the application area supplied Department of Water and Environmental Regulation permit to construct dam application	Shire has granted DA for dam subject to conditions outlined in Section 3.3. Photographs of the application area were sufficient to inform vegetation condition and type. DWER have determined that an exemption under Division 1 Part 3 Clause 5 of the RIWI Act. No permit is required to construct the dam, nor a licence to take water from the dam.

Summary of comments	Consideration of comment
Revegetation Plan provided in response to Request for Further Information.	Applicant has provided a revegetation plan which satisfies the CAWS Act requirements.

Appendix B – 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 C.

1. Site characteristics

Site characteristic	Details				
Local context	The proposed clearing area is a 2.283 ha isolated patch of vegetation. It is surrounded by farmland, predominately horticulture, although there are other patches of remnant vegetation within the associated Lots. Spatial data indicates the local area (10 km radius of the proposed clearing area) retains approximately 48 per cent of the original native vegetation cover; areas to the south and west in remain highly vegetated.				
Vegetation description	<p>Photographs supplied by the applicant indicate the vegetation within the proposed clearing area consists of predominately planted trees over a weedy understorey. There are areas of native shrub regeneration and, based on photographs provided, <i>Eucalyptus rudis</i> (flooded gum) in the lower lying areas. Representative photos are available in Appendix E.</p> <p>This is inconsistent with the Mattiske and Havel (1998) vegetation mapping of the application area, which mapped the location as within the Pemberton Complex (PM1), characterised by tall open forest of <i>Eucalyptus diversicolor</i> with mixtures of <i>Corymbia calophylla</i> on valley slopes and low forest of <i>Taxandria juniperina-Banksia seminuda-Callistachys lanceolata</i> on valley floors in the perhumid zone.</p>				
Vegetation condition	<p>Photographs supplied by the applicant indicate the vegetation within the proposed clearing area is in a Degraded to Completely Degraded condition (Keighery, 1994) condition, described as:</p> <ul style="list-style-type: none"> 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. <p>The full Keighery condition rating scale is provided in Appendix D, below. Representative photos are available in Appendix E.</p>				
Soil description	The soil is mapped as Pemberton Subsystem (Pimelia, 254Pv), which is characterised by soils 20 to 40 m deep. Flat to gently sloping floors with few channels. 3 to 10 deg slopes. Smooth slopes. Red or yellow gradational soils, not calcareous with some red duplex soils (Schoknecht <i>et al.</i> 2004).				
Land degradation risk	<table border="1"> <thead> <tr> <th>Risk categories</th> <th>Risk</th> </tr> </thead> <tbody> <tr> <td>Subsurface Acidification</td> <td>>70% of map unit has a high subsurface acidification risk or is presently acid</td> </tr> </tbody> </table>	Risk categories	Risk	Subsurface Acidification	>70% of map unit has a high subsurface acidification risk or is presently acid
	Risk categories	Risk			
Subsurface Acidification	>70% of map unit has a high subsurface acidification risk or is presently acid				

Site characteristic	Details	
	Wind erosion	30-50% of map unit has a high to extreme wind erosion risk
	Water erosion	10-30% 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
	Flood risk	<3% of map unit has a moderate to high flood risk
	Water logging	3-10% of map unit has a moderate to very high waterlogging risk
	Advice provided by the Commissioner of Soil and Land Conservation indicates that there were no significant land degradation risks associated with the proposed clearing (CSLC, 2020).	
Waterbodies	<p>The application area is mapped as a palusvale wetland (Wetland Code, 0745 and ID 738), which is an area subject to seasonal waterlogging. The native vegetation regenerating in areas is consistent with a wetland.</p> <p>A natural, non-perennial minor watercourse drains the application area northwards, to a large dam and then to Lefroy Brook approximately 400 metres to the north-west of the application area.</p>	
Conservation areas	The closest conservation area is a Timber Reserve, located 155 metres north of the application area. Donnelly State forest is located 1,400 metres south-west of the application area.	
Climate and landform	Rainfall within the area is approximately 1,100 mm per annum, with evapotranspiration 800 mm per annum (BOM, 2020). The application area falls within a drainage line in the landscape, with a gentle slope northwards.	

2. Flora, fauna and ecosystem analysis

With consideration for the site characteristics set out above and relevant datasets (see Appendix F), conservation significant flora and fauna species, and conservation significant ecological communities are not likely to be impacted by the clearing.

3. Vegetation extent

	Pre-European extent (ha)	Current extent (ha)	% remaining	Current extent in all DBCA managed land (ha)	% current extent in all DBCA managed land (proportion of pre-European extent)
IBRA bioregion					
Warren	833,985.56	659,432.21	79.1	386,622.86	46.4
Vegetation complex					
Pemberton PM1	25,801.16	16,661.53	64.6	15,021.45	58.2
Local Area (10 km radius)					
	32,203	15,571	48.4	-	-

Appendix C – 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> “Native vegetation should not be cleared if it comprises a high level of biodiversity.”</p> <p><u>Assessment:</u> The application area is unlikely to support regionally significant flora, fauna or ecological communities due to the poor vegetation condition; the proposed clearing area is unlikely to support high levels of biodiversity.</p>	Not likely to be at variance	No
<p><u>Principle (b):</u> “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.”</p> <p><u>Assessment:</u> The native vegetation within the proposed clearing area does not contain any significance for fauna predominately due to the vegetation condition of the area. No native trees were identified as providing foraging, roosting or breeding habitat for black cockatoos.</p>	Not likely to be at variance	No
<p><u>Principle (c):</u> “Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</p> <p><u>Assessment:</u> The proposed clearing area is unlikely to contain habitat for flora species listed as threatened under the <i>Biodiversity Conservation Act 2016</i> (BC Act).</p>	Not likely to be at variance	No
<p><u>Principle (d):</u> “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.”</p> <p><u>Assessment:</u> The proposed clearing area does not contain vegetation consistent with communities listed as threatened under the BC Act.</p>	Not likely to be at variance	No
Environmental values: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> “Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</p> <p><u>Assessment:</u> The extent of native vegetation within the bioregion, mapped vegetation type and local area are consistent with the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001). Vegetation in the proposed clearing area is not considered to be part of a significant ecological linkage in the local area.</p>	Not likely to be at variance	No
<p><u>Principle (h):</u> “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.”</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 values: land and water resources		

Assessment against the Clearing Principles	Variance level	Is further consideration required?
<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 that there is one mapped wetland and one watercourse mapped within the application area, and the native vegetation regenerating is consistent with wetland vegetation, the proposed clearing area is associated with a wetland or watercourse.</p> <p>The proposed clearing area lies within an area subject to native vegetation clearing controls under the <i>Country Areas Water Supply Act 1947</i> (CAWS Act).</p>	At variance	Yes Refer to Section 3.2.1 above.
<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> Noting the extent of the proposed clearing, the location within the landscape, and the climatic conditions on the area, the proposed clearing may have an appreciable impact on land degradation, predominately water erosion.</p>	May be at variance	Yes Refer to Section 3.2.1 above.
<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> Given the location of the proposed clearing area in the landscape and the risk of land degradation, the proposed clearing may impact surface or ground water quality.</p>	May be at variance	Yes Refer to Section 3.2.1 above.
<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> The mapped soils and topographic contours in the surrounding area, and the extent of clearing do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding.</p>	Not likely to be at variance	No

Appendix D – 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.

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 E – Biological survey information excerpts / photographs of the vegetation



Figure 2: Tree species growing within the drainage line, potentially native *Eucalyptus rudis*.



Figure 3: Native shrub regeneration in wetter areas.



Figure 4: Planted trees in upland area within the south portion of the application area.

Appendix F – References and databases

1. GIS datasets

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

- Aboriginal Heritage Places (DPLH-001)
- 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)
- IBRA Vegetation Statistics
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Regional Parks (DBCA-026)
- Soil and Landscape Mapping – Best Available

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)

2. References

- Bureau of Meteorology (BOM) (2020) Climate statistics for Australian locations. Manjimup (station ID: 9573). Accessed June 2020. Bureau of Meteorology, Government of Australia.
- Commissioner of Soil and Land Conservation (CLSC) (2019) Request to discharge portion of agreement to reserve. Letter dated 16 August 2019. Department of Primary Industries and Regional Development. Letter provided by applicant 20 April 2020 (DWER Ref: A1885941).
- Commissioner of Soil and Land Conservation (CLSC) (2020) Land Degradation Advice and Assessment Report for clearing permit application CPS 8767/1 received 4 June 2020; Department of Primary Industries and Regional Development (DWER Ref. A1900290).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Water and Environmental Regulation (DWER) (2019) Application for dam construction – Permit not required. Letter dated 16 December 2019 and supplied by the applicant 27 January 2020 (DWER Ref: A1862342).
- Government of Western Australia (2019) 2018 South West Vegetation Complex Statistics. Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.
- Shire of Manjimup (2019) Notice of Determination on Application for Development Approval: Dam Lot 11219, 358 Churches Road, Jardee. Notice dated 10 December 2019, supplied by the applicant 27 January 2020 (DWER Ref: A1862342).
- Western Australian Herbarium (1998-2019) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> Accessed November 2019.