

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number:	CPS 9415/1
File Number:	DWERVT8556
Duration of Permit:	From 29 May 2022 to 29 May 2029

PERMIT HOLDER

Australasian Conference Association Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 104 on Plan 302282, Mornington

AUTHORISED ACTIVITY

The permit holder must not clear more than 0.84 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

CONDITIONS

1. Period during which clearing is authorised

The permit holder must not clear any native vegetation after 29 May 2024.

2. 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.

3. 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.

4. Directional clearing

The Permit Holder must:

- (a) conduct *clearing* activities authorised under this Permit in one direction towards adjacent *native vegetation*; and
- (b) allow a reasonable time for fauna present within the area being *cleared* to move into that adjacent *native vegetation* ahead of the *clearing* activity.

5. Retain vegetative material and topsoil, and rehabilitation

- (a) The Permit Holder must retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.
- (b) The Permit Holder must within 12 months of undertaking clearing authorised under this Permit and no later than 29 May 2025, revegetate and rehabilitate the areas that are no longer required for the purpose for which they were cleared under this Permit by:
 - (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land;
 - (ii) ripping the ground on the contour to remove soil compaction; and
 - (iii) laying the vegetative material and topsoil retained under Condition 5(a) on the cleared area.
- (c) The Permit Holder must within 18 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 5(b) of this Permit:
 - (i) engage an environmental specialist to determine the species composition, structure and density of the vegetation of area revegetated and rehabilitated; and
 - (ii) engage an environmental specialist to make a determination as to whether the composition, structure and density determined under condition 5(c)(i) of this Permit will, without further revegetation, result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area.
- (d) If the determination made by the environmental specialist under condition 5(c)(ii) is that the species composition, structure, and density determined under condition 5(c)(i) will not, without further revegetation, result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, the Permit Holder must revegetate the area by deliberately planting and/or *direct seeding native vegetation* seeds that will result in a similar species

composition, structure, and density of *native vegetation* to pre-clearing vegetation types in that area.

- (e) Where additional planting or *direct seeding* of *native vegetation* is undertaken in accordance with condition 5(d), the Permit Holder must repeat the activities required by condition 5(c) and 5(d) within 12 months of undertaking the additional planting or *direct seeding* of native vegetation.
- (f) Where a determination is made by an environmental specialist under condition 5(c)(ii) that the composition, structure and density within areas revegetated and rehabilitated will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, that determination shall be submitted to the CEO within three months of the determination being made by the environmental specialist.

6. 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.

No.	Relevant matter	Specifications
1.	In relation to the authorised clearing activities generally	 (a) the species composition, structure, and density of the cleared area; (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings; (c) the date that the area was cleared; (d) the size of the area cleared (in hectares); (e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 2 of this permit; (f) actions taken to minimise the risk of the introduction and spread of <i>weeds</i> and <i>dieback</i> in accordance with condition 3 of this permit; and (g) direction of clearing activities in accordance with condition 4 of this permit.
2.	In relation to the <i>revegetation</i> and <i>rehabilitation</i> areas pursuant to condition 5 of this Permit	 (a) the location of any areas <i>revegetated</i> and <i>rehabilitated</i>, 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) a description of the <i>revegetation</i> and <i>rehabilitation</i> activities undertaken; (c) the size of the area <i>revegetated</i> and <i>rehabilitated</i> (in hectares); (d) the species composition, structure and density of <i>revegetation</i> and <i>rehabilitation</i>; (e) the number of plants and species installed; (f) any remedial actions undertaken; and (g) a copy of the environmental specialist's report.

Table 1:	Records	that	must	be	kept
----------	---------	------	------	----	------

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

In this permit, the terms in Table 2 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.		
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.		
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.		
direct seeding	means a method of re-establishing vegetation through establishment of a seed bed and the introduction of seeds of the desired plant species.		
EP Act	Environmental Protection Act 1986 (WA)		
fill	means material used to increase the ground level, or to fill a depression.		
local provenance means <i>native vegetation</i> seeds and propagating material from natural sources with kilometres and the same Interim Biogeographic Regionalisation for Australia (IB) subregion of the area cleared.			
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.		
planting	means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species.		
rehabilitate, rehabilitated and rehabilitation means actively managing an area containing <i>native vegetation</i> in order to improve ecological function of that area using methods such as natural <i>regeneration</i> , <i>directive seeding</i> and/or <i>planting</i> , so that the species composition, structure and density is to pre-clearing vegetation types in that area.			
revegetate/ed/ion means the re-establishment of a cover of <i>local provenance native vegetation</i> in using methods such as natural regeneration, <i>direct seeding</i> and/or <i>planting</i> , so species composition, structure and density is similar to pre-clearing vegetation that area.			
	means any plant –		
weeds	 (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture</i> <i>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. 		



Ryan Mincham MANAGER NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

6 May 2022

SCHEDULE 1

The boundary of the area authorised to be cleared is shown in the map below.



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



Clearing Permit Decision Report

Application details and outcome					
1.1. Permit application	I.1. Permit application details				
Permit number:	CPS 9415/1				
Permit type:	Area permit				
Applicant name:	Australasian Conference Association Ltd				
Application received:	31 August 2021				
Application area:).84 hectares of native vegetation				
Purpose of clearing:	Dam construction or maintenance				
Method of clearing:	Mechanical Removal				
Property:	Lot 104 on Plan 302282				
Location (LGA area/s):	Shire of Harvey				
Localities (suburb/s):	Mornington				

1.2. Description of clearing activities

The application is from Australasian Conference Association Ltd for an Area Permit to clear 0.84 hectares of native vegetation, within Lot 104 on Deposited Plan 302282, Mornington, for the purpose of dam development (see Figure 1, Section 1.5). The proposed method of clearing is with the use of an excavator and dozer.

1.3. Decision on application

Decision:	Granted
Decision date:	6 May 2022
Decision area:	0.84 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 undertaking their assessment and in accordance with section 510 of the EP Act, the Delegated Officer has given consideration to the site characteristics (see Appendix A), the Clearing Principles in Schedule 5 of the EP Act (see Appendix B), the supporting information supplied by the applicant (Australasian Conference Association Ltd 2021b), relevant planning instruments and any other pertinent matters they deemed relevant to the assessment (see Section 3), as well as relevant datasets available at the time of the assessment (see Appendix E).

The assessment has identified that the proposed clearing will result in the following:

- the loss of native vegetation that is suitable habitat for a range of conservation significant fauna species;
- the potential introduction and spread of weeds and dieback into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values.

Whilst the proposed clearing is impacting suitable fauna habitat, it is not considered significant habitat due to the extent of remnant vegetation in the local area and in nearby conservation estate (Harris River State Forest) with comparable habitat value. The proposed clearing is not likely to have an impact on vegetation acting as a significant steppingstone for fauna movement. It is recognised that impacts to individual fauna may occur at the time of clearing.

After consideration of the available information, the Delegated Officer has determined that with appropriate management conditions, the proposed clearing is not likely to lead to an unacceptable risk to the environment. The Delegated Officer has decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity
- revegetation management to restore the areas to be cleared which are not required for the construction of
- o dam
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback.

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.

CPS 9415/1, 6 May 2022

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 510 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)
- Planning and Development Act 2005 (WA) (P&D Act)
- Rights in Water and Irrigation Act 1914 (RIWI 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

In relation to avoidance and mitigation measures, the applicant advised that the area around the new dam will be revegetated after the dam development is completed and the dam location and high-water level at RL 165 metre Australian Height Datum (AHD) has been selected to avoid additional clearing.

The Delegated Officer was satisfied that the applicant has undertaken reasonable measures to avoid and minimise potential impacts of the proposed clearing on environmental values.

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 may present a risk to fauna biological values and water resources. 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 Principles (a)

Assessment

According to available databases, there are 13 priority flora species and no threatened flora species recorded within the local area. Although some of these species are mapped within the local area on the same soil type and within the same vegetation complex as those mapped within the application area, the application area is unlikely to provide suitable habitat for these species. As illustrated in Figures 1 and 2 below, the vegetation within the application area consists of dense shrubs of *Melaleuca* sp. over an understory in degraded (Keighery, 1994) condition dominated by introduced species, including *Rubus* sp. The invasive weeds are dominant in some portions of the application area and have suffocated the native understory vegetation. The high weed load reduces the potential for any priority species to establish themselves within the application area.



Figures 1 and 2: Photographs of representative vegetation within the application area (Australasian Conference Association 2021b).

Outcome:

Based on the above assessment, the Delegated Officer has determined that the proposed clearing is unlikely to have any long-term adverse impacts on any conservation significant flora species. The application area occurs adjacent to remnants of native vegetation. Adhering to weed and dieback management measures (as conditioned on the clearing permit) will minimise the risk of weeds and dieback being spread.

3.2.2. Biological values (fauna) - Clearing Principles (b)

Assessment

According to available databases, 23 conservation significant fauna species have been recorded within the local area (Department of Biodiversity, Conservation and Attractions (DBCA, 2007)). Of the conservation significant fauna species recorded within the local area, the following have the potential to be found within the application area based on habitat preferences (see Appendix A.3):

- Forest red-tailed black cockatoo (Calyptorhynchus banksii naso)
- Baudin's cockatoo (Calyptorhynchus baudinii)
- Carnaby's cockatoo (Calyptorhynchus latirostris)
- White-tailed black cockatoo (Calyptorhynchus sp. 'white-tailed black cockatoo')
- Chuditch (Dasyurus geoffroii)
- Peregrine falcon (Falco peregrinus)
- Quenda (*Isoodon fusciventer*) (P4)
- South-western brush-tailed phascogale (Phascogale tapoatafa wambenger)
- Western ringtail possum (Pseudocheirus occidentalis)
- Woylie, brush-tailed bettong (Bettongia penicillata ogilbyi)
- Australasian bittern (Botaurus poiciloptilus)
- Sharp-tailed sandpiper (Calidris acuminata)
- Australian little bittern (*Ixobrychus dubius*)
- Numbat, walpurti (Myrmecobius fasciatus)
- Western brush wallaby (Notamacropus irma)
- Glossy ibis (*Plegadis falcinellus*)
- Quokka (Setonix brachyurus); and
- Wood sandpiper (Tringa glareola).

Black cockatoos

The application area falls within the modelled distribution of Carnaby's cockatoo (*Calyptorhynchus latirostris*), forest red-tailed black cockatoo (*Calyptorhynchus banksia* subsp. *naso*) and Baudin's cockatoo (*Calyptorhynchus baudinii*) (collectively referred to as 'black cockatoos' herein this report). Based on the DBCA datasets, a total of nine records for white-tailed black cockatoo, 19 records for forest red-tailed black cockatoo, 30 records for Baudin's black cockatoo and eight records of Carnaby's cockatoo were identified within the local area. The photographs of the representative vegetation within the application area (Australasian Conference Association 2021b) indicate that application area contains one juvenile *Eucalyptus marginata* and *Corymbia calophylla* trees. Noting their size, these trees are unlikely to provide breeding or roosting habitat for black cockatoos. However, noting typical black

cockatoo foraging species (Commonwealth of Australia, 2012), although very limited, these trees may provide foraging habitat for black cockatoos. Taking into consideration the small extent of black cockatoo foraging habitat in the application area relative to the surrounding native vegetation, including nearby Harris River State Forest which is mapped as black cockatoo feeding habitat, the black cockatoo foraging habitat within the application area is not considered significant in the local context.

Western ringtail possum is an arboreal folivore, associated with long unburnt mature remnant peppermint (*Agonis flexuosa*) woodlands along the Swan Coastal Plain management zone from Mandurah to Augusta, characterised by high canopy cover and connectivity (DPAW, 2017). Throughout the range of the western ringtail possum, suitable habitat also includes marri and jarrah woodlands and other *Eucalyptus* dominated forests with appropriate canopy, that provide suitable foraging habitat and tree hollows for breeding and diurnal refuge (DPAW, 2017). As the application area comprises a small amount of marri and jarrah, the application area may provide suitable habitat for the western ringtail possum.

Common themes for critical habitat include high nutrient foliage availability for food, suitable structures for protection, and canopy continuity to escape predation and other threats (DPAW, 2017). It is acknowledged that the application area comprises 0.84 hectares of degraded vegetation that has been fragmented by historical clearing for pasture. The application area includes a sparse canopy with connectivity throughout the remnant and to other remnants of native vegetation in the local area and may not represent the habitat resources typically associated with critical habitat. Given the above and the presence of larger, intact remnants of suitable habitat for western ringtail possums in the local area, it is not considered likely that the application area represents significant habitat for the western ringtail possums or that the proposed clearing represents a significant risk to the continuation of the species. However, as there is potential that western ringtail possums could be using the site at the time of the clearing, direct impacts to individuals may occur.

Other species

The western brush wallaby, western ringtail possum, numbat, quokka, quenda, south-western brush-tailed phascogale, and woylie are known to occupy low, dense understorey located nearby watercourses, dense shrublands or marri and jarrah forest (Department of Environment and Conservation, 2012; Department of Parks and Wildlife, 2014) which occur within the application area. Noting this, the application area may provide suitable habitat for these species. Taking into consideration the abundance of native vegetation occurring within the local area (including the DBCA managed Harris River State Forest), which is likely to provide similar or better habitat, the application area is not likely to provide significant habitat for these species. However, individuals of these species may be subject to individual harm should they be present at the time of clearing.

Migratory birds

The Australasian bittern, sharp-tailed sandpiper, peregrine falcon, Australian little bittern, glossy ibis, and the wood sandpiper are known to inhabit low dense understory located nearby watercourses, dense shrubland or marri and jarrah forest and forage on aquatic invertebrates. The application area may comprise suitable habitat for these species but noting habitat preferences and the small extent of the proposed clearing, the application area is unlikely to comprise a significant habitat for these species. In addition, there is an existing dam adjacent to the proposed clearing area to which these species can move until the new one is constructed, on which basis the proposed clearing is considered unlikely to have a significant impact on the conservation of these species. It is also acknowledged that larger and more intact suitable remnants of native vegetation persist in the local area that also contain watercourses, which may provide more suitable habitat for these species.

Ecological linkage

According to available databases, the application area is mapped approximately 1.5 kilometres west of a mapped Southwest Regional Ecological Linkage. Given the separation distance and the extent of the proposed clearing, the proposed clearing is not likely to have an impact on the environmental value of this linkage.

A review of aerial imagery indicates that the vegetation in the application area is reasonably isolated and not likely to function as an ecological linkage enabling fauna to move between areas of remnant vegetation. In addition, aerial imagery and spatial datasets indicate that larger patches of remnant vegetation occur near the application area which are more likely to be used by fauna for movement across the landscape. Therefore, the proposed clearing is not likely to have an impact on vegetation acting as a significant steppingstone for fauna movement.

Outcome and conditions:

Although the proposed clearing is not assessed as impacting significant habitat for conservation significant fauna, the Delegated Officer has determined that the following fauna management conditions be imposed on the permit:

- a condition which requires the applicant to undertake slow, progressive one-directional clearing to allow terrestrial fauna to disperse into adjacent suitable habitat ahead of the clearing activity should they occur on site at the time of clearing
- weed and dieback hygiene measures to mitigate the risk of impacts to adjacent fauna habitat; and
- revegetation management to restore fauna habitat values which are not required for the construction of dam.

3.2.3. Environmental values: water resources - Clearing Principles (f)

Assessment

According to available databases, the application area intersects a non-perennial natural tributary of Harvey River. A review of the representative photos of the vegetation within the application area (Australasian Conference Association Ltd, 2021b) noted some riparian vegetation. Further, the application area falls within a proclaimed Surface Water Area: Brunswick River and Tributaries under section 27 of the RIWI Act. It has been noted that the application area may contain some vegetation growing in, or in association with the watercourse. Given the extent of the application area and degraded condition of vegetation within it, the proposed clearing is not likely to have a significant impact upon riparian vegetation or the environmental values of the watercourse.

Outcome:

For the reasons set out above, it is considered the impacts of the proposed clearing are unlikely to have any long-term adverse impacts on the hydrological and ecological values of the watercourse.

Conditions

No clearing permit conditions are necessary in relation to this matter.

3.3. Relevant planning instruments and other matters

Shire of Harvey issued Development Approval for the proposed dam on 9 March 2022.

DWER South West Region granted a permit to interfere with the bed and banks of a watercourse (PMB207162(1)) and licence to take water (SWL207165(1)) for the proposed dam construction on 25 March 2022.

No registered 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

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	The area proposed to be cleared is a 0.84-hectare patch of native vegetation in the intensive land use zone of Western Australia.
	The subject freehold lot is within a rural zoning in Mornington, Western Australia and is adjacent to the east side of Martin Road.
	Spatial data indicates the local area (10-kilometre radius from the perimeter of the area proposed to be cleared) retains approximately 43 per cent of the original native vegetation cover.
Ecological linkage	A Southwest Regional Ecological linkage (Object ID 98), is mapped approximately 1.5 km east of the application area.
Conservation areas	Harris River State Forest is mapped approximately 1.3 km east of the application area.
Vegetation description	Photographs supplied by the applicant indicate the vegetation within the proposed clearing area consists of dense shrubs of <i>Melaleuca</i> sp. over an understory dominated by introduced species, including <i>Rubus</i> sp. Representative photos and maps are available in Appendix D.
	 This is consistent with the mapped vegetation type(s): (206) Southwest vegetation complex(es), which is described as open forest of <i>Eucalyptus marginata</i> subsp. <i>marginata-Corymbia calophylla-Eucalyptus patens</i> on valley slopes to woodland of <i>Eucalyptus rudis-Melaleuca rhaphiophylla</i> on the valley floors in humid and subhumid zones (Shepherd et al, 2001).
	The mapped vegetation type retains approximately 76 per cent of the original extent (Government of Western Australia, 2019).
Vegetation condition	Photographs supplied by the applicant indicate the vegetation within the proposed clearing area is in degraded (Keighery, 1994) condition. The full Keighery (1994) condition rating scale is provided in Appendix C. Representative photos and mapping are available in Appendix D.
Climate and landform	Rainfall: 1100 millimetres
	Evapotranspiration: 800 millimetres Groundwater Salinity (Total Dissolved Solids): 500-1000 milligrams per litre total dissolved solids Contour type 3: Elevation 160 and Contour type 3: Elevation 165
Soil description	The soil is mapped as 255Lv- deep oneissic valleys, in the south of the Western Darling
	Range. Loamy earth, loamy duplex, gravel and stony soils supporting Jarrah-marri forest (DWER 2021).
Land degradation	The soils within the application area comprise of high water erosion, subsurface acidification, and phosphorus export risk ratings
Waterbodies	The desktop assessment and aerial imagery indicated that three minor, non-perennial watercourses transect the area proposed to be cleared. These are:
	 inland waters - Waterlines - Minor River, Nonperennial natural Watercourse occurs along the entire length of the application area
	inland waters - Waterlines - Minor River, Nonperennial natural Watercourse Connector, connects directly with the East side of the application area
	nydrographic catchments - Catchments: Harvey Diversion Harvey River within the application area
	Other watercourse information for the application area and local area.
	 Bydrological Zones of WA (DEIRD-069): Western Darling Range- Moderately dissected lateritic plateau on granite with deeply incised valleys, includes the Darling Scarp on the western margin

Characteristic	Details
	 indland Waters - Waterpolys - Manmade Earthdam directly aligning with the East area of application area. (extenson of this dam for this application)
	 geomorphic Wetlands, Swan Coastal Plain: Artificial lake- Basin (current unlicenced wetland that applicant is proposing to extend).
Hydrogeography	The application area is mapped within Proclaimed Surface water Areas:
	Brunswick River and Tributaries under section 27 of the RIWI Act.
	The application area is not mapped within Proclaimed Groundwater Areas.
Flora	According to available databases, there are 13 priority flora species and no threatened flora species recorded within the local area.
	Of these, six flora species occur in the same soil system as the application area.
	Of these, three flora species occur in the same soil subsystem phase as the application area, which is Balingup moderate slopes Phase.
	All six may occur within suitable vegetation that occurs in the application area.
	Given the above and the species preferences (WA Herbarium, 1998-), Acacia semitullata (Priority 4), Boronia tenuis (Priority 4), Caladenia speciosa (Priority 4), Caladenia uliginosa subsp. Patulens (Priority 1), Juncus meianthus (Priority 3) and Senecio leucoglossus (Priority 4) have the potential to occur in the application area.
Ecological	There are no TECs or PECS within the application area.
communities	
	TECs and buffers in the local area: Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region (Banksia WL SCP) (State Priority 3) (Commonwealth, Endangered) approximately 7.1 km north of the application area.
Fauna	According to available databases:
	 23 conservation significant fauna species have been recorded within the local area
	• a historical record of numbat, walpurti (<i>Myrmecobius fasciatus</i>) from 1956 is located approximately 0.148 km from the application area and is the closest record of a conservation significant fauna species from the application area
	The closest record of Carnaby's cockatoo is located approximately 1.99 km from the application area
	 The closest record of forest red-tailed black cockatoo is located approximately 4.22 km from the application area
	The closest record of Baudin's cockatoo is located approximately 4.22 km from the application area
	• The closest white-tailed black cockatoo breeding habitat is located approximately 6.57 km from the application area
	• The closest red-tailed black cockatoo breeding habitat is located approximately 18.3 km from the application area
	• The closest black cockatoo roosting site can be found approximately 6.6 km north of the application area.
	A likelihood of analysis identified 18 species that may occur within the application area based on vegetation, foraging, babitat suitability and proximity to water

A.2. Flora analysis table

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

Species name	Conservation status	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records in local area (total)	Are surveys adequate to identify? [Y, N, N/A]
Acacia semitrullata	P4	Y	Y	6.08	2	N/A
Boronia tenuis	P4	Y	Y	7.75	1	N/A

Species name	Conservation status	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records in local area (total)	Are surveys adequate to identify? [Y, N, N/A]
Caladenia speciosa	P4	Y	Y	3.65	2	N/A
Caladenia uliginosa subsp. Patulens	P1	Y	Y	8.25	3	N/A
Juncus meianthus	P3	Y	Y	7.77	1	N/A
Senecio leucoglossus	P4	Y	Y	0.83	6	N/A

A.3. Fauna analysis table

Species name	Conservati on status	Suitable habitat features? [Y/N]	Suitable vegetatio n type? [Y/N]	Distance of closest record to application area (km)	Number of known records in local area (total)	Are surveys adequate to identify? [Y, N, N/A]
Bettongia penicillata ogilbyi (Woylie, brush-tailed bettong)	CR	Y	Y	1.8	36	N/A
Botaurus poiciloptilus (Australasian bittern)	EN	Y	Y	7.9	9	N/A
Calidris acuminata (Sharp-tailed sandpiper)	МІ	Y	Y	9.2	1	N/A
Calyptorhynchus banksii naso (forest red-tailed black cockatoo)	VU	Y	Y	4.2	19	N/A
Calyptorhynchus baudinii (Baudin's cockatoo)	EN	Y	Y	4.2	30	N/A
Calyptorhynchus latirostris (Carnaby's cockatoo)	EN	Y	Y	1.9	8	N/A
Calyptorhynchus sp. 'white-tailed black cockatoo' (White-tailed black cockatoo)	EN	Y	Y	6.6	9	N/A
Dasyurus geoffroii (Chuditch, western quoll)	VU	Y	Y	1.4	33	N/A
Falco peregrinus (Peregrine falcon)	OS	Y	Y	7	3	
Isoodon fusciventer (Quenda, southwestern brown bandicoot)	P4	Y	Y	1.4	43	N/A
Ixobrychus dubius (Australian little bittern)	P4	Y	Y	9.1	3	N/A
Myrmecobius fasciatus (Numbat, walpurti)	EN	Y	Y	0.15	4	N/A
Notamacropus irma (Western brush wallaby)	P4	Y	Y	4.2	6	N/A
Phascogale tapoatafa wambenger (South- western brush-tailed phascogale, wambenger	CD	Y	Y	2.5	11	N/A
Plegadis falcinellus (Glossy ibis)	МІ	Y	Y	8.2	1	N/A
Pseudocheirus occidentalis (Western ringtail possum, ngwayir	CR	Y	Y	2.1	16	N/A
Setonix brachyurus (Quokka)	VU	Y	Y	1.9	57	N/A
Tringa glareola (Wood sandpiper)	MI	Y	Y	7.9	5	N/A

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority, CD: Species of special conservation interest (conservation dependent fauna); OS: Other specially protected fauna.

A.4. Land degradation risk table

Risk categories	Balingup moderate slopes Phase (255LvBL4)
Wind erosion	3-10% of map unit has a high to extreme wind erosion risk
Water erosion	50-70% 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 flood risk
Water logging	<3% 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 Is further Assessment against the clearing principles Variance level consideration required? Environmental value: biological values Principle (a): "Native vegetation should not be cleared if it comprises a high Not likely to Yes level of biodiversity." be at Refer to Section variance Assessment: 3.2.1, above The area proposed to be cleared does not contain any locally or regionally significant flora, fauna, habitats or assemblages of plants. The application area is in degraded condition. The area proposed to be cleared contains jarrah forest, dense shrubland and watercourses with riparian vegetation. The vegetation in the application area is unlikely to provide significant habitat for fauna and flora species. The application area does not intersect any or contain species representative of a Priority Ecological Community (PEC). Principle (b): "Native vegetation should not be cleared if it comprises the Not likely to Yes whole or a part of, or is necessary for the maintenance of, a significant be at habitat for fauna." variance Refer to Section 3.2.2, above Assessment: The application area comprises limited suitable habitat for three black cockatoo species, western ringtail possum, numbat, guokka, guenda, western ringtail possum, western brush wallaby, woylie, and south-western brush-tailed phascogale, chuditch and a range of mostly migratory bird species. Given the abundance of native vegetation in the local area, the habitat in the application area is not considered significant in the local context. Principle (c): "Native vegetation should not be cleared if it includes, or is Not likely to No necessary for the continued existence of, threatened flora." be at variance Assessment: No threatened flora have been recorded within the local area. The area proposed to be cleared is unlikely to contain habitat for threatened flora species listed under the BC Act. Principle (d): "Native vegetation should not be cleared if it comprises the Not likely to No whole or a part of, or is necessary for the maintenance of, a threatened be at ecological community." variance Assessment: According to available datasets, the vegetation within the application area is not representative of any known state or Commonwealth listed threatened ecological communities. Environmental value: significant remnant vegetation and conservation areas Principle (e): "Native vegetation should not be cleared if it is significant as a Not likely to No remnant of native vegetation in an area that has been extensively cleared." be at variance Assessment: The extent of native vegetation 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.

Assessment against the clearing principles	Variance level	Is further consideration required?
<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."	Not likely to be at variance	No
Assessment:		
Given the nearest conservation area is 1.3 kilometres east of the application area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.		
Environmental value: land and water resources		
<u>Principle (f):</u> "Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."	At variance Yes Refer to 3.2.3, ab	Yes Refer to Section
Assessment:		3.2.3, above.
Given watercourses are recorded within the application area, the proposed clearing will impact riparian vegetation. may impact on- or off-site hydrology and water quality.		
Principle (g): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."	Not likely to be at	No
Assessment:	variance	
The mapped soils are highly susceptible to water erosion, subsurface acidification, and phosphorus export risk. Noting the extent of the application area, the proposed clearing is not likely to have an appreciable impact on land degradation.		
<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."	Not likely to be at variance	Yes Refer to Section
Assessment:		0.2.0, 0.0000.
No long-term impacts on quality of surface and underground water are anticipated. The proposed clearing may impact surface water quality through an increased sediment load. However, given the small extent of the proposed clearing, the sediment increase is considered to be minor and temporary only.		
Given the abundance of native vegetation in the local area and marginal level of salinity mapped within the application area, the proposed clearing will unlikely lead to a perceptible rise in the water table and an increase in groundwater salinity levels.		
<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."	Not likely to be at variance	No
Assessment:		
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.		

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 several 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 Southwest 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



Figures 2-6. Location images (Australasian Conference Association Ltd 2021b).

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)
- 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 Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Mapping Best Available
- Soil Landscape Mapping Systems

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

- Australasian Conference Association Ltd (2021a) *Clearing permit application CPS 9415/1*, received 31 August 2021 (DWER Ref: DWERDT498069).
- Australasian Conference Association Ltd (2021b) *Supporting information for clearing permit application CPS* 9415/1, received 31 August 2021 (DWER Ref: DWERDT498069).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Commonwealth of Australia (2012) *EPBC Act referral guidelines for three threatened black cockatoo species*. Department of Sustainability, Environment, Water, Populations and Communities, Canberra.
- Department of Agriculture, Water and the Environment (DAWE) (2021) *The Peregrine Falcon (Falco peregrinus) Fact Sheet.* Department of Agriculture, Water and the Environment, Canberra.
- Department of Environment and Conservation (DEC) (2008) Forest black cockatoo (Baudin's cockatoo, Calyptorhynchus baudinii, and forest red-tailed black cockatoo, Calyptorhynchus banksii naso) Recovery Plan. Department of Environment and Conservation, Canberra.
- Department of Environment and Conservation (DEC) (2012a) *Chuditch (Dasyurus geoffroii) Recovery Plan.* Wildlife Management Program No. 54. Department of Environment and Conservation, Perth, Western Australia.

- Department of Environment and Conservation (DEC) (2012b) Fauna profiles: Brush-tailed phascogale, Phascogale tapoatafa. Department of Environment and Conservation, Perth, Western Australia.
- Department of Environment and Conservation (DEC) (2012c) *Fauna profiles: Quenda, Isoodon obesulus fusciventer*. Department of Environment and Conservation, Perth, Western Australia.
- Department of Environment Regulation (DER) (2014). 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 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.
- Department of Water and Environmental Regulation (DWER) (Regulatory Services Water) (2021) *Rights in Water and Irrigation Act 1914 advice for clearing permit application CPS 9415/1*, received 6 May 2021 (DWER Ref: A2069410).
- Government of Western Australia (2019) 2018 South West Vegetation Complex Statistics. Current as of April 2019. WA Department of Biodiversity, Conservation and Attractions, Perth, https://catalogue.data.wa.gov.au/dataset/dbca
- Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) *Vegetation Complexes of the Darling System, Western Australia*. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- 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.
- Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) *South West Regional Ecological Linkages Technical Report*, Western Australian Local Government Association and Department of Environment and Conservation, Perth.
- 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.
- Shah, B. (2006) *Conservation of Carnaby's Black-Cockatoo on the Swan Coastal Plain, Western Australia.* December 2006. Carnaby's Black-Cockatoo Recovery Project. Birds Australia, Western Australia.
- 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.
- Shire of Harvey (2021) Advice for clearing permit application CPS 9415/1, received 14 October 2021 (DWER Ref: DWERDT516184).
- Western Australian Herbarium (1998-). *FloraBase the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions, Western Australia. https://florabase.dpaw.wa.gov.au/ (Accessed November 2021).