



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

### PERMIT DETAILS

Area Permit Number: 8944/1  
File Number: DWERVT5945  
Duration of Permit: 8 January 2021 to 8 January 2023

### PERMIT HOLDER

Turf and Surf Pty Ltd

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 82 on Diagram 98086, Yallingup

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.147 hectares of native vegetation within the area cross hatched yellow on attached Plan 8944/1.

### CONDITIONS

#### 1. 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.

#### 2. 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.

#### 3. Sediment management

The Permit holder must ensure that clearing activities related to the purpose of this permit shall not take place outside of the period of 1 December to 30 April in any year.

#### 4. 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 1 of this Permit; and

- (e) actions taken to minimise the risks of the introduction and spread of *weeds* and *dieback* in accordance with condition 2 of this Permit.

## 5. Reporting

The Permit Holder must provide to the *CEO* the records required under condition 4 of this Permit, when requested by the *CEO* or delegated officer

## 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;

*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 Parks and Wildlife 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*

16 December 2020

# Plan 8944/1

115°2'52.440"E

115°2'55.680"E



115°2'58.920"E



LOT 81 ON PLAN 98086

CITY OF BUSSELTON  
LOT 82 ON PLAN 98086

## Legend

-  CPS areas approved to clear
-  Land Tenure

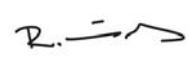


0 25 50 75 100 m



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MGA Zone 50  
Geocentric Datum of Australia 1994

  
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Officer delegated under section 20 of the  
Environmental Protection Act 1986







# Clearing Permit Decision Report

## 1. Application details and outcome

### 1.1. Permit application details

<b>Permit number:</b>	CPS 8944/1
<b>Permit type:</b>	Area permit
<b>Applicant name:</b>	Turf and Surf Pty Ltd
<b>Application received:</b>	18 June 2020
<b>Application area:</b>	0.147 hectares
<b>Purpose of clearing:</b>	Construction of four soak wells
<b>Method of clearing:</b>	Mechanical
<b>Property:</b>	Lot 82 on Diagram 98086
<b>Location (LGA area/s):</b>	City of Busselton
<b>Localities (suburb/s):</b>	Yallingup

### 1.2. Description of clearing activities

The vegetation applied to be cleared is contained within five individual areas (see Figure 1, Section 1.5). The proposed clearing area is 0.147 hectares in size for the purpose of constructing soak wells.

### 1.3. Decision on application and key considerations

<b>Decision:</b>	Granted
<b>Decision date:</b>	16 December 2020
<b>Decision area:</b>	0.147 hectares of native vegetation 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 June 2020. 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 D), relevant planning instruments, and any other pertinent matters they deemed relevant to the assessment (see Sections 3 and 4).

In particular, the Delegated Officer has determined that the impacts to the Gunyulgup Brook which intersects with the three sections of the application area are not significant, noting these areas have been highly disturbed and comprise of regrowth vegetation.

To ensure consistency with other Departmental and Local Government approvals, the Department has conditioned the permit to ensure clearing activities are only conducted between 1 December to 30 April in any year.

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

### 1.5. Site map

# Plan 8944/1



115°2'52.440"E

115°2'55.680"E

115°2'58.920"E



## Legend

-  CPS areas approved to clear
-  Land Tenure



0 25 50 75 100 m



1:1000

MGA Zone 50  
Geocentric Datum of Australia 1994

Officer delegated under section 20 of the  
Environmental Protection Act 1986



GOVERNMENT OF  
WESTERN AUSTRALIA

Figure 1. Map of area approved to clear, cross hatched in yellow.

## 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;

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Rights in Water and Irrigation Act 1914*
- *Planning and Development Act 2005* (WA) (P&D Act)

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)

## 3. Detailed assessment of application

### 3.1. Avoidance and mitigation measures

Evidence was submitted by the applicant that the proposed soak wells have been designed to avoid clearing where possible. Five of the *Agonis* sp. are all less than five years old and the remaining eight are regrowth less than three years old. The size of the trees is depicted in Figures 1 and 2 (see Appendix F).

### 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 C) and considered whether the clearing poses a risk to environmental values. The assessment against the Clearing Principles is contained in Appendix D.

This assessment did not identify any matters likely to substantially impact on the area's environmental values. As such, the limited impact of the clearing is acceptable and no further consideration of the environmental values or imposition of management conditions are necessary.

#### 3.2.1. Environmental value: biological values (fauna) – Clearing Principle (b)

**Assessment:** Based on available datasets, 23 fauna species specially protected under the BC Act, 15 species protected under International agreement, three fauna species specifically protected and nine priority fauna species have been recorded within the local area. Of these species, the application areas appear to only contain suitable habitat for *Pseudocheirus occidentalis* (Western Ringtail Possum, WRP) based on the site characteristics (Appendix C). The closest known record for this species is approximately 810 metres away from the application area. Whilst habitat suitable for WRP is within the application area, it is not considered significant as the proposed clearing area comprises of five small individual stands of disturbed vegetation in a degraded to completely degraded (Keighery, 1994) condition and adjoins areas of intact vegetation in an equal, or better condition than the application area.

**Outcome:** Based on the above assessment, the Delegated Officer has determined that the proposed clearing is considered acceptable in relation to this environmental value.

**Conditions:** No fauna management conditions required.

#### 3.2.2. Environmental value: biological values (flora) – Clearing Principles (a) to (d)

**Assessment:**

A desktop assessment of available datasets did not identify any threatened or priority species within the application area. A wider desktop assessment of the local area (10 km) identified one threatened flora species that had the potential to occur based on habitat requirements (soil and vegetation) (Appendix C).

*Caladenia excelsa* (T) has been mapped as occurring within 500 metres of the application area, with datasets showing the species is mapped within a similar vegetation and soil type that occurs within the application area. The nearby populations were recorded within vegetation dominated by *Elythranthera* sp., *Diuris* sp., *Burchardia congesta* with associated species being *Allocasuarina fraserianna*, *Caladenia flava*, *Agonis flexuosa* and *Nuytsia floribunda*. The soil type consisted of white moist sands (WA Herbarium, 1998).

As shown in site photos under Appendix F, the proposed clearing areas have been highly disturbed comprising of predominately regrowth *Agonis* trees over a predominate ground cover of weeds. Noting this, it is considered unlikely the proposed clearing areas consist of suitable habitat for *Caladenia excelsa*.

There are no priority or threatened ecological communities mapped as occurring within the application area. Taking into account the condition and structure of the vegetation represented in the application area in comparison to the ecological communities identified as occurring in the local area, the vegetation within the application area is not a representation of an ecological community of significance.

Outcome: Based on the above assessment, the Delegated Officer has determined that the proposed clearing is considered acceptable in relation to this environmental value.

Conditions: No flora and/or vegetation management conditions required.

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

#### Assessment:

Within the local area, several wetlands and watercourses area known to occur, however in the context of the clearing, the following were noted due to their close proximity to the application area.

- a Leeuwin Naturaliste Ridge and Donnybrook to Nannup Geomorphic Wetland (unreviewed) is located approximately 260 metre east of the application area;
- Leeuwin Naturaliste Ridge and Donnybrook to Nannup Geomorphic Wetland (unreviewed) is located approximately 230 metre north of the application area; and
- the Gunyulgup Brook transverses three sections of the application area.

In the context of the proposed clearing and noting that the application area has been highly disturbed and comprises of regrowth vegetation in a degraded to completely degraded (Keighery, 1994) condition, impacts to the Gunyulgup Brook and surface water quality are expected to be minimal and limited to the duration of the proposed clearing. In addition, taking into context the size of the clearing over five small, individual sections of vegetation that are highly disturbed, the proposed clearing is unlikely to contribute to land degradation or flooding in the local area.

The DA was given the application number DA20/0068 and determined by the City of Busselton on 9 December 2020. Condition 5 of the DA stated 'Construction works shall not take place outside of the period of 1 December to 30 April in any year'. The Department has conditioned the permit only allowing for the clearing to be conducted during this window in any year to ensure consistency with the other DWER and LGA approvals.

Outcome: Based on the above assessment, the Delegated Officer considered the impacts of the proposed clearing are unlikely to have any long-term adverse impact on the hydrological and ecological values of the watercourse.

Conditions: Sediment management condition to ensure clearing activities are conducted between 1 December to 30 April in any year to mitigate any potential sediment disturbance during the higher stream flow periods.

### **3.3. Relevant planning instruments and other matters**

Other relevant authorisations required for the proposed land use include:

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

On 14 December 2020, the applicant submitted a development approval from the City of Busselton for the proposed construction of soak wells at Lot 82 on Diagram 98086. The City considered the application and approved the development, subject to conditions. The DA was given the application number DA20/0068 and determined on 9 December 2020. Condition 5 of the DA stated 'Construction works shall not take place outside of the period of 1 December to 30 April in any year'. The Department has conditioned the permit only allowing for the clearing to be conducted during this window in any year to ensure consistency with the other DWER and LGA approvals.

The applicant has applied for a section 17 permit under the RIWI Act to authorise interference with the watercourse for the construction of the proposal on-stream soaks and vehicle crossing.

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 C – 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 D.

### 1. Site characteristics

Site characteristic	Details		
Local context	The proposed clearing area consists of five small patches of native vegetation. These areas are on the edge of a larger remnant of vegetation. The local area (10 km radius of the proposed clearing area) retains approximately 47% of the original native vegetation cover.		
Vegetation description	<p>Photographs and information supplied by the applicant indicates the vegetation within the proposed clearing area consists of 12 <i>Angonis flexuosa</i> trees over <i>Juncus pallidus</i> and <i>Juncus krausii</i> and surrounded by kikuyu grass.</p> <p>This is inconsistent with the mapped vegetation type:</p> <ul style="list-style-type: none"> <li>Cowaramup (Cw2), which is described as a woodland of <i>Eucalyptus marginata</i> subsp. <i>marginata-Corymbia calophylla</i> on slopes and low woodland of <i>Melaleuca preissiana-Banksia littoralis</i> on depressions in perhumid and humid zones (Mattiske and Havel, 1998)</li> </ul>		
Vegetation condition	<p>Photographs supplied by the applicant indicate the vegetation within the proposed clearing area is in degraded to completely degraded (Keighery, 1994) condition.</p> <p>The full Keighery condition rating scale is provided in Appendix E, below. Representative photos are available in Appendix F.</p>		
Soil description	The soil is mapped as Cowaramup value phase (map unit 216CoCOv) described as Small, narrow V-shaped drainage depression with gravelly duplex (Forest Grove) soils.		
Land degradation risk	<b>Hazard/Aspect</b>	<b>Cowaramup Value Phase</b>	
		<b>Degradation risk (% of subsystem at risk)</b>	<b>Risk rating</b>
	Wind erosion	65%	High to Extreme
	Waterlogging and inundation	8%	Moderate to Very High
	Water Erosion	2%	Very High to Extreme
	Salinity	0%	Moderate
	Flood risk	25%	Moderate to High
	Phosphorus export	36%	High to Extreme
Waterbodies	The desktop assessment and aerial imagery indicated that the Gonyulgup brook transects the application area. The brook is described as a non-perennial watercourse.		



Site characteristic	Details
	<p>Two mapped Geomorphic wetlands Leeuwin Naturaliste and Donnybrook to Nannup occur within close proximity of the application area;</p> <ul style="list-style-type: none"> <li>• 260 metres east; and</li> <li>• 230 metres north</li> </ul> <p>Both wetlands are classified as paluslope wetlands (seasonally waterlogged) and occur in areas that are subject to disturbance from development and farming practices.</p>
Conservation areas	The Leeuwin-Naturaliste National Park occurs 230 metres east of the application area.
Climate and landform	The annual rainfall for the area is 1000 millimetres. The areas landform is relatively flat with gentle slopes across the application area in a north to south direction, two metre contour lines from 64 metres to 58 metres AHD

## 2. Flora, fauna and ecosystem analysis

With consideration for the site characteristics set out above and relevant datasets (see Appendix G), the following conservation significant flora / fauna species have the potential to occur within the application area based on suitable habitat features. Numerous conservation significant ecological communities have been recorded within the local area, however, the vegetation present within the application area is not representative of any of these communities.

Species / Ecological Community	Distance of closest record to application area (kilometres)	Suitable soil type? (flora, ecological community)	Suitable vegetation type? (flora, ecological community)	Suitable habitat features (fauna)	Are surveys adequate to identify? (Y, N, N/A)
<b>Flora</b>					
<i>Caladenia excelsa</i> (T)	500 metres	Based on the soil mapping it occurs on similar soil as the application area.	Based on the vegetation mapping it occurs with similar vegetation as the application area, however the vegetation under application is not indicative of the mapped vegetation type, therefore the application is unlikely to support suitable habitat for this species.	N/A	N/A
<b>Ecological communities:</b> Based upon the area to be cleared and the vegetation type present, the application area is not a representation of a priority or threatened ecological community. Below is records of known ecological communities that occur in the local area.					
<i>Banksia Dominated Woodlands of the Swan Coastal Plain IBRA</i>	4.3 kilometres	N	The vegetation under application	N/A	N/A

Species / Ecological Community	Distance of closest record to application area (kilometres)	Suitable soil type? (flora, ecological community)	Suitable vegetation type? (flora, ecological community)	Suitable habitat features (fauna)	Are surveys adequate to identify? (Y, N, N/A)
<i>Region</i> (Priority 3, TEC under Commonwealth)			is not representative of this ecological community		
<i>Melaleuca lanceolata</i> forests, <i>Leeuwin Naturaliste Ridge</i> (Priority 2)	2.1 kilometres	N	The vegetation under application is not representative of this ecological community	N/A	N/A
<i>Whicher Scarp Paluslope Wetlands</i> (Priority 1)	4.9 kilometres	N	The vegetation under application is not representative of this ecological community	N/A	N/A
<i>Corymbia calophylla</i> , <i>Melaleuca raphiophylla</i> , <i>Banksia littoralis</i> , <i>Eucalyptus rudis</i> , <i>Agonis flexuosa</i> low open forest with seasonal subsoil moisture ( <i>Dunsborough area</i> ) (Priority 1)	6.8 kilometres	N	The vegetation under application is not representative of this ecological community	N/A	N/A
<i>Calothamnus graniticus</i> heaths on south-west coastal granites (Vulnerable)	4.3 kilometres	N	The vegetation under application is not representative of this ecological community	N/A	N/A
Dense shrublands on clay flats (floristic community type 9 as originally described in Gibson et al. (1994)) (Vulnerable)	6.9 kilometres	N	The vegetation under application is not representative of this ecological community	N/A	N/A
<i>Corymbia calophylla</i> - <i>Eucalyptus marginata</i> woodlands on sandy clay soils of the southern Swan Coastal Plain (floristic community type 3b as originally described in Gibson et al. (1994)) (Vulnerable)	7.2 kilometres	N	The vegetation under application is not representative of this ecological community	N/A	N/A
<i>Corymbia calophylla</i> woodlands on heavy soils of the southern Swan Coastal Plain (floristic community type 1b as originally described in Gibson et al. (1994)) (Vulnerable)	8.5 kilometres	N	The vegetation under application is not representative of this ecological community	N/A	N/A
<b>Fauna</b>					
<i>Pseudocheirus occidentalis</i> ( <i>Western Ringtail Possum</i> ) T	810 metres	N/A	N/A	Yes, but limited and not	N/A

Species / Ecological Community	Distance of closest record to application area (kilometres)	Suitable soil type? (flora, ecological community)	Suitable vegetation type? (flora, ecological community)	Suitable habitat features (fauna)	Are surveys adequate to identify? (Y, N, N/A)
				considered significant	

### 3. Vegetation extent

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

	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					
Jarrah Forest	4,506,660	2,399,838	53	1,673,614	37
Vegetation complex					
Cowaramup (Cw2)	13,692	4,442	32.5	863	6.3
Local Area (10kilometre radius)	-	-	47.5	-	-

### Appendix D – Assessment against the Clearing Principles

Assessment against the Clearing Principles	Variance level	Is further consideration required?
<b>Environmental value: biological values</b>		
<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 proposed clearing area does not contain locally or regionally significant flora, fauna, habitats or assemblages of plants.</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 proposed clearing area contains habitat suitable for WRP, however, the habitat is not considered to be significant based on its limited extent and comprising of regrowth vegetation over five small areas.</p>	Not likely to be at variance	Yes Section 3.2.1

Assessment against the Clearing Principles	Variance level	Is further consideration required?
<p><u>Principle (c):</u> <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p><u>Assessment:</u> The proposed clearing area is unlikely to contain flora species listed as threatened under the BC Act.</p>	Not likely to be at variance	Yes Section 3.2.2
<p><u>Principle (d):</u> <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.”</i></p> <p><u>Assessment:</u> The proposed clearing area does not contain species representative of a threatened ecological community listed under the BC Act.</p>	Not likely to be at variance	No
<b>Environmental values: significant remnant vegetation and conservation areas</b>		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u> The extent of the mapped vegetation type is consistent with the national objectives and targets for biodiversity conservation in Australia. Vegetation in the proposed clearing area is not considered to be part of a significant ecological linkage in the local area. The local area is not extensively cleared.</p>	Not likely to be 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 the nearby conservation areas.</p>	Not likely to be at variance	No
<b>Environmental values: land and water resources</b>		
<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> The application areas are not within a mapped wetland. Three of the five application areas intersect with the Gunyulgup Brook</p>	Is at variance	Yes Section 3.2.4
<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 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> The potential for an increase in surface water run-off has the potential to lead to sedimentation of the Gunyulgup Brook. However, noting the location of the proposed clearing areas (cleared land of the eastern side of these areas) and the disturbance to the application areas, impacts to water quality are expected to be minimal and limited to the duration of the proposed clearing activities.</p>	May be at variance	Yes Section 3.2.4



Assessment against the Clearing Principles	Variance level	Is further consideration required?
<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 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 E – 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.

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 F – Photographs of the vegetation**



*Figure 1 Slumping and erosion of the eastern bank. Significant cracks have developed causing the side to collapse.*





Figure 2 Proposed soak 2 located north of the vegetation in foreground.

## Appendix G – References and databases

### 1. GIS datasets

Publicly available GIS Databases used (sourced from [www.data.wa.gov.au](http://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

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