



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:CPS 10091/2Permit Holder:Peel-Harvey Catchment CouncilDuration of Permit:From 11 August 2023 to 11 August 2028

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

PART I – CLEARING AUTHORISED

1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of *Typha* species removal.

2. Land on which clearing is to be done

Lot 33 on Deposited Plan 89615, Boddington Lot 84 on Deposited Plan 403065, Boddington Lot 62 on Deposited Plan 144657, Boddington Lot 2 on Diagram 16287, Boddington Lot 140 on Deposited Plan 215188, Boddington Lot 166 on Deposited Plan 189624, Boddington Lot 15755 on Plan 15859, Boddington Lot 172 on Deposited Plan 243154, Boddington Lot 173 on Deposited Plan 243154, Boddington Lot 180 on Deposited Plan 33781, Boddington Lot 9005 on Deposited Plan 60465, Boddington Lot 501 on Deposited Plan 75278, Boddington Lot 100 on Deposited Plan 411277, Boddington Lot 100 on Deposited Plan 421144, Boddington Lot 26 on Deposited Plan 144657, Quindanning Lot 10 on Diagram 88501, Quindanning Lot 13 on Deposited Plan 75618, Quindanning Lot 40 on Deposited Plan 75839, Williams Lot 33 on Deposited Plan 143936, Williams Lot 13312 on Deposited Plan 201730, Williams Lot 13313 on Deposited Plan 201730, Williams Lot 13314 Deposited Plan 201730, Willams Lot 360 on Deposited Plan 192072, Williams Lot 34 on Deposited Plan 144534, Williams Lot 15844 on Deposited Plan 218658, Williams Lot 50 on Diagram 88540, Williams

Lot 366 on Deposited Plan 219577, Williams Lot 365 on Deposited Plan 219577, Williams Lot 14 on Plan 23391, Williams Lot 15 on Plan 23391, Williams Lot 16 on Plan 23391, Williams Lot 17 on Plan 23391, Williams Lot 18 on Plan 23391. Williams Lot 19 on Plan 23391, Williams Lot 15999 on Plan 23391, Williams Lot 101 on Deposited Plan 30194, Williams Lot 500 on Deposited Plan 53044. Williams Lot 79 on Deposited Plan 61120, Williams Lot 9001 on Deposited Plan 63114, Williams Lot 501 on Deposited Plan 61325, Williams Lot 22 on Deposited Plan 75669, Williams Lot 40 on Deposited Plan 415858, Williams Lot 41 on Deposited Plan 415858, Williams Lot 509 on Deposited Plan 416523, Williams Williams Location D 0 (Part) (PIN 552550), Williams Crown Reserve 20283, (PIN 552723), Williams Hakea Road Reserves (PIN 1188295, 11067671, 11351545, 11351558), Boddington Bannister-Marradong Road Reserve (PIN 11351536), Boddington Colin Street Road Reserve (PIN 11351546), Boddington Farmers Avenue Road Reserve (PIN 11351547), Boddington Pollard Street Road Reserve (PIN 11351560), Boddington Unnamed Road Reserve (PIN 11351582 and PIN 11351545), Boddington Pinjarra-Williams Road Reserve (PIN 11331571), Williams Albany Highway Road Reserve (PIN 11329022, 11437574), Williams Brooking Street Road Reserve (PIN 11417483, 11417486, 12017964), Williams Cornwall Terrace road reserve (PIN 11437577), Williams Unallocated Crown Land (PIN 1046599), Quindanning Unallocated Crown Land (PIN 550726, 552533, 552727, 552732, 552735, 552941, 552942, 552943, 552947, 552948, 1049843, 1388497, 11500456), Williams Water (PIN 1249666), Ouindanning Water (PIN 11488050), Boddington Water (PIN 1153927, 1177659, 1252473), Williams

3. Clearing authorised

The permit holder must not clear more than 0.5 hectares of *native vegetation* within the combined areas cross-hatched yellow in Figure 1, Figure 2 and Figure 3 of Schedule 1.

PART II – MANAGEMENT CONDITIONS

4. 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.

5. 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.

6. Directional clearing

- (a) Conduct clearing 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 adjacent *native vegetation* ahead of the clearing activity.

7. Fauna Management

- (a) Prior to undertaking any clearing authorised under this permit, the permit holder must inspect the area authorised to be cleared under this permit prior to works commencing and for the duration of clearing for any native fauna that may be present.
- (b) Where fauna have been identified under condition 7(a), works must cease until the fauna have escaped into adjacent habitat ahead of the clearing activity or translocated into adjacent *native vegetation*.

8. Weed management – Chemical

Undertake spraying of herbicide during the driest period of the year when the water level is at its lowest and during calm conditions.

PART III - RECORD KEEPING AND REPORTING

9. 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	Spec	ifications
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 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings;
		(c)	the date that the area was cleared;

Table 1: Records that must be kept

No.	Relevant matter	Specifications		
		(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 4	
		(f)	actions taken to minimise the risk of the introduction and spread of <i>weeds</i> and <i>dieback</i> in accordance with condition 5	
		(g)	actions taken to mitigate fauna impacts in accordance with condition 6	
		(h)	actions taken to mitigate fauna management in accordance with condition 7; and	
		(i)	The date that chemical weed control occurred in accordance with condition 8.	

10. Reporting

The permit holder must provide to the *CEO* the records required under condition 9 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table 2 have the meanings defined.

Term	Definition			
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .			
clearing	has the meaning given under section $3(1)$ of the EP Act.			
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.			
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.			
department	means the department established under section 35 of the <i>Public Sector</i> <i>Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.			
EP Act	Environmental Protection Act 1986 (WA)			
fill	means material used to increase the ground level, or to fill a depression.			
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.			
native vegetation	has the meaning given under section $3(1)$ and section $51A$ of the EP Act.			
weeds	 means any plant – (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i>; or 			

Table 2: Definitions

Term	Definition
	 (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

END OF CONDITIONS

Burton

Vessica Burton A/MANAGER NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

03 December 2024

Schedule 1

The boundary of the areas authorised to be cleared is shown in the maps below (Figure 1, Figure 2 and Figure 3).



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



Figure 2: Map of the boundary of the area within which clearing may occur



Figure 3: Map of the boundary of the area within which clearing may occur



Clearing Permit Decision Report

1 Application details and outcome				
1.1. Permit application details				
Permit number:	CPS 10091/2			
Permit type:	Purpose permit			
Applicant name:	Peel-Harvey Catchment Council			
Application received:	22 April 2024			
Application area:	0.5 hectare of native vegetation			
Purpose of clearing:	Typha species removal			
Method of clearing:	Mechanical			
Property:	List of properties (Refer to Appendix A)			
Location (LGA area/s):	Shire of Boddington, Shire of Williams			
Localities (suburb/s):	Boddington, Williams			

1.2. Description of clearing activities

The original application under CPS 10091/1 was to selectively clear 0.5 hectares of Typha species along a minor tributary of the Hotham River (Site A) within a broader 10.14 hectare clearing footprint.

The application to amend is for selective clearing of 0.5 hectares of Typha species along three minor tributaries within the Shire of Boddington and Shire of Williams within a broader 64 hectare clearing footprint. Two additional areas (Site B and Site C) have been added.

The clearing will target two invasive Typha species, *Typha domingensis* and *T. orientalis* and will take place within various properties and road reserves in the Shire of Boddington and the Shire of Williams. The Typha will be cleared using herbicide. The applicant proposes to clear Typha species over multiple years to maintain and improve condition of restoration sites.

1.3. Decision on application				
Decision:	Granted			
Decision date:	3 December 2024			
Decision area:	0.5 hectare of native vegetation as depicted in Section 1.5, below.			

1.4. Reasons for decision

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

In making this decision, the Delegated Officer took into consideration that the previous assessment was undertaken less than 18 months ago, and that the applicant has not proposed to increase the amount of clearing from the original

authorised amount of 0.5 hectares. The Delegated Officer also notes that the purpose of clearing is for the removal of invasive Typha species to support environmental restoration of the three clearing locations.

The Delegated officer determined that the assessment against the clearing principles outlined in Schedule 5 of the EP Act is considered not to have changed since the assessment for CPS 10091/1 and that the current conditions of CPS 10091/1 are sufficient in managing and mitigate impacts of the clearing. The Delegated Office decided to grant an amended clearing permit.

1.5. Site maps



Figure 1: Map of the application area at Site A, crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.



Figure 2: Map of the application area at Site B crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.



Figure 3: Map of the application area at Site C crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.

2 Legislative context

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

In addition to the matters considered in accordance with section 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)
- 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 (DER, December 2013)
- Procedure: Native vegetation clearing permits (DWER, October 2019)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The applicant advised that only Typha would be cleared as a part of the application. The applicant has proposed to only spray herbicide using specific and controlled hand application in appropriate weather and site conditions and during the appropriate control window for the Typha species (Peel and Harvey Catchment Council, 2023).

The Delegated Officer is satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

3.2. Assessment of impacts on environmental values

A review of current environmental information (Appendix B) reveals that the assessment against the clearing principles has not changed significantly from the Clearing Permit Decision Report CPS 10091/1.

A review of available databases for the additional proposed clearing areas (Site B and Site C) found that the proposed clearing of Typha at Site C occurs within a mapped threatened ecological community (TEC) – Eucalyptus Woodlands of the Western Australian Wheatbelt listed as critically endangered under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) and occurs within an extensively cleared landscape with the local area containing less that 10 percent of the pre-European vegetation extent.

However, given the extent of the proposed clearing and that the clearing will only remove invasive Typha species, it is not considered for the proposed clearing to impact vegetation representing a TEC or impact a significant remnant of native vegetation within an extensively cleared landscape.

Given the above, the assessment of environmental impacts against the clearing principles remains unchanged and can be found in the decision report prepared for clearing permit CPS 9916/1. The Delegated Officer considers that the existing conditions on Permit 10091/1 are sufficient in managing and mitigate the impacts of the clearing and has determined that the proposed amendment to 10091/1 is unlikely to lead to an unacceptable risk to the environment.

3.3. Relevant planning instruments and other matters

The Shire of Boddington (2024) has advised that they support the application to clear and advised no planning or development approvals from the Shire are required. No comments have been received from the Shire of Williams.

The application area falls within the Murray River System Surface Water Area, as proclaimed under the Rights I Water and Irrigation Act 1914 (RIWI Act). DWER Water Licencing determined that a water licence or permit would not be required to undertake the clearing proposed. However, the use of methods outlined in the Stream Stabilisation River restoration 2001 report to manage water quality impacts in sites affected by construction or removal activities should be adhered to (DWER, 2023).

An Aboriginal site of significance have been mapped within the application area at Site A, the Hotham River (Place ID 27935). 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. Property List

Property
Lot 33 on Deposited Plan 89615, Boddington
Lot 84 on Deposited Plan 403065, Boddington
Lot 62 on Deposited Plan 144657, Boddington
Lot 2 on Diagram 16287, Boddington
Lot 140 on Deposited Plan 215188, Boddington
Lot 166 on Deposited Plan 189624, Boddington
Lot 15755 on Plan 15859, Boddington
Lot 172 on Deposited Plan 243154, Boddington
Lot 173 on Deposited Plan 243154, Boddington
Lot 180 on Deposited Plan 33781, Boddington
Lot 9005 on Deposited Plan 60465, Boddington
Lot 501 on Deposited Plan 75278, Boddington
Lot 100 on Deposited Plan 411277, Boddington
Lot 100 on Deposited Plan 421144, Boddington
Lot 26 on Deposited Plan 144657, Quindanning
Lot 10 on Diagram 88501, Quindanning
Lot 13 on Deposited Plan 75618, Quindanning
Lot 40 on Deposited Plan 75839, Williams
Lot 33 on Deposited Plan 143936, Williams
Lot 13312 on Deposited Plan 201730, Williams
Lot 13313 on Deposited Plan 201730, Williams
Lot 13314 Deposited Plan 201730, Williams
Lot 360 on Deposited Plan 192072, Williams
Lot 34 on Deposited Plan 144534, Williams
Lot 50 on Diagram 88540, Williams
Lot 36 on Deposited Plan 210577, Williams
Lot 365 on Deposited Plan 219577, Williams
Lot 14 on Plan 23391 Williams
Lot 15 on Plan 23391 Williams
Lot 16 on Plan 23391 Williams
Lot 17 on Plan 23391 Williams
Lot 18 on Plan 23391, Williams
Lot 19 on Plan 23391, Williams
Lot 15999 on Plan 23391, Williams
Lot 101 on Deposited Plan 30194, Williams
Lot 500 on Deposited Plan 53044, Williams
Lot 79 on Deposited Plan 61120, Williams
Lot 9001 on Deposited Plan 63114, Williams
Lot 501 on Deposited Plan 61325, Williams
Lot 22 on Deposited Plan 75669, Williams
Lot 40 on Deposited Plan 415858, Williams
Lot 41 on Deposited Plan 415858, Williams
Lot 509 on Deposited Plan 416523, Williams
Williams Location D 0 (Part) (PIN 552550), Williams
Crown Reserve 20283, (PIN 552723), Williams
Hakea Road Reserves (PIN 1188295, 11067671, 11351545, 11351558),
Boddington
Bannister-Marradong Road Reserve (PIN 11351536), Boddington
Colin Street Road Reserve (PIN 11351546), Boddington
Farmers Avenue Road Reserve (PIN 11351547), Boddington
Pollard Street Road Reserve (PIN 11351560), Boddington
Unnamed Road Reserve (PIN 11351582 and PIN 11351545), Boddington
Pinjarra-Williams Road Reserve (PIN 11331571), Williams
Albany Highway Road Reserve (PIN 11329022, 11437574), Williams
Brooking Street Road Reserve (PIN 11417483, 11417486, 12017964),
Williams

Cornwall Terrace road reserve (PIN 11437577), Williams
Unallocated Crown Land (PIN 1046599), Quindanning
Unallocated Crown Land (PIN 550726, 552533, 552727, 552732, 552735,
552941, 552942, 552943, 552947, 552948, 1049843, 1388497,
11500456), Williams
Water (PIN 1249666), Quindanning
Water (PIN 11488050), Boddington
Water (PIN 1153927, 1177659, 1252473), Williams

Appendix B. Site characteristics

B.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 the department at the time of this assessment.

Characteristic	Details			
Local context	The areas proposed to be cleared are part of a patch of native vegetation along tributaries within the intensive land use zone of Western Australia.			
	Aerial imagery indicates the local area (10-kilometre radius from the centre of the areas proposed to be cleared) retains approximately 41 per cent of the original native			
	Vegetation cover for Site A, 50 percent for Site B and 12 percent for Site C.			
	Clearing will be restricted to the removal of Typha from the riparian vegetation.			
Ecological linkage	No formal ecological linkages have been mapped within the application areas.			
Conservation areas	The closest conservation area is a DBCA timber reserve 370 metres south-west of the application area at Site A. Given the distance, the proposed clearing will not impact this reserve.			
	Site B occurs within 4.5 km of an unnamed timber reserve. Given the distance, the proposed clearing will not impact this reserve			
	Site C occurs 760 metres from Williams Nature Reserve. Given the distance, the proposed clearing will not impact this reserve			
Vegetation description	The proposed clearing targets the removal of Typha species growing in association with natural water courses.			
	According to available datasets, the vegetation in the application area contains the following mapped vegetation types:			
	 Coolakin 51: described as a woodland of <i>Eucalyptus wandoo</i> with mixtures of <i>Eucalyptus patens, Eucalyptus marginata subsp. thalassica</i> and <i>Corymbia</i> <i>calophylla</i> on the valley slopes in arid and perarid zones. Miebibia 185 described as a speak woodland of <i>Eucalyptus wandoo</i> over Assein 			
	• Michibin 185 described as a open woodland of <i>Eucalyptus wandoo</i> over <i>Acacla</i> acuminata with some <i>Eucalyptus loxophleba</i> on valley slopes, with low woodland of <i>Allocasuarina huegeliana</i> on or near shallow granite outcrops in arid and perarid zones.			
	 Williams 301: Mixture of woodland of <i>Eucalyptus rudis-Melaleuca rhaphiophylla</i>, low forest of <i>Casuarina obesa</i> and tall shrubland of <i>Melaleuca spp.</i> on major valley systems in arid and perarid zones. Bappieter 4: described as Jarrah marri and wandos Eucalyptus marrinata 			
	 Damister 4. described as sarrah, man and wandoo Eddayptds marginata, Corymbia calophylla, E. wandoo and Williams 7: described as wheatbelt; York gum, salmon gum etc. Eucalyptus loxophleba, E. salmonophloia. Goldfields; gimlet, redwood etc. E. salubris, E. oleosa. Riverine; rivergum E. camaldulensis. 			

Characteristic	Details				
	The mapped vegetation types retain approximately 39, 26, 26, 27 and 10 per cent of original extent, respectively.				
Vegetation condition	Aerial imagery indicate the vegetation within the proposed clearing area is in good to completely degraded (Keighery, 1994) condition.				
	The full Keigher	y (1994) condition rating scale is provided in Appendix C.			
Climate and landform	The application maximum temper of 8 degrees Ce	The application areas experience a Mediterranean climate with an annual mean maximum temperature of 23.8 degrees Celsius and annual mean minimum temperature of 8 degrees Celsius. The mean annual rainfall is approximately 521 millimetres.			
Soil description	The soils area m	happed as the following:			
	Name	Michibin Subsystem (Quindanning)			
	Soils	253QdMN			
	Description	Hillslopes containing soils formed by the weathering of fresh rock. Rock outcrop is common.			
	Nomo	Williama Subayatam (Ouindanning)			
	Soils				
	Description	Valley floor subtended by the steep slopes of the Michibin unit; yellow duplex soils and a lower sandy terrace			
	Name	Norrine subsystem (Quindanning)			
	Soils	253QdNO			
	Description	A complex of lateritic residuals and associated pediment; gravely sand, sand, duplex yellow soils and duricrust			
	Name	Noombling Subsystem (Dellvanine)			
	Soils	257DeNB			
	Description	Long gentle and undulating hillslopes and divides. Colluvium over granite, gneiss and sometimes dolerite. Grey and yellow/brown deep sandy duplexes, sandy gravels and shallow duplexes. Marri-Wandoo woodland; Jam-Sheoak understory			
	Name	Coolakin Subsystem (Marradong)			
	Soils	253MuCK			
	Description	Minor Valleys bounded by Dwellingup or Norrine units; moderate slopes with gravelly and sandy yellow duplex soils; a minor valley floor with sandy alluvium; occasional rock outcrops and laterite spur			
Land degradation risk	There is a high amount of variability in the land degradation risk between the soils occurring across the application areas. All had a high risk of subsurface acidification, with Norrine having a high risk of wind erosion and the rest having low to medium risk. The relatively small area of proposed clearing is not likely to cause appreciable land				
	degradation.				
Waterbodies	Site A The desktop assessment and aerial imagery indicated that a minor non perennial tributary of the Hotham River runs through the majority of the application area at Area A with the northern section of the application area along the banks of the major Hotham river.				

Characteristic	Details
	Site B and Site C The desktop assessment and aerial imagery indicated that a minor non perennial tributary of the Williams River runs through the majority of the application area.
Flora	A total of eight conservation significant flora occurs within the local area with the closest record 46 metres from the application area at Site A.
	No new flora species were recorded within the local areas for Sites B and Site C.
	There is one species of conservation significant flora that is known to be associated with wetland habitat and could possibly occur adjacent to Typha stands. Noting the clearing will be the targeted application of herbicide on Typha, impacts to conservation significant flora is considered low.
Ecological communities	Site A and Site B One priority ecological community is mapped as occurring in the local area the 'Mount Saddleback heath communities' which is a Priority 1 under DBCA. This is mapped 3.5 Kilometres and 4.5 kilometres from the application areas, respectively and does not include Typha species.
	Site C Mapped as Eucalyptus woodlands of western Australian wheatbelt TEC listed under the EPBC Act. No clearing of Eucalyptus trees is proposed.
Fauna	A total of 19 conservation significant fauna occurs in the local areas with one recorded within Site A, the Numbat (Myrmecobius fasciatus). No new fauna species were recorded within the local areas for Sites B and Site C.

Appendix C. Vegetation condition rating scale

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

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

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

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

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

Appendix D. Sources of information

D.1. GIS databases

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

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- DBCA Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography Inland Waters Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Offsets Register Offsets (DWER-078)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality Flood Risk (DPIRD-007)
- Soil Landscape Land Quality Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping Systems
- Wheatbelt Wetlands Stage 1 (DBCA-021)

Restricted GIS Databases used:

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

D.2. References

Peel Harvey Catchment Council (2024) *Clearing permit application to amend CPS 10091/1* and supporting information; received 22 April 2024 (DWER Ref: DWERDT937457).

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- 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) (2023) *Rights in Water* and Irrigation Act 1914 advice for clearing permit application CPS 10091/1 received 1 July 2023 (DWER Ref: DWERDT796786).
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- Government of Western Australia. (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <u>https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics</u>
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