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Native Vegetation Clearance

Petaluma Winery 254 Pfeiffer Road, Woodside

Data Report

Clearance under the Native Vegetation Regulations 2017

5 December 2022 Prepared by JS Ayre & Associates

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1. Application information

Application Details

Applicant:	Petaluma Winery				
Key contact:	Woolcock Construction	l			
Landowner:	Petaluma				
Site Address:	254 Pfeiffer Road, Woodside, 5244	Ļ			
Local Government	Adelaide Hills Council	Hundred:	Onkaparinga		
Area:					
Title ID:	CT 6171/710	Parcel ID	F156727 A92		

Summary of proposed clearance

Purpose of clearance	Clearance required for the construction of a new building			
Native Vegetation Regulation	Regulation 12, Schedule 1; clause 33, New Dwelling or Building			
Description of the vegetation under application	Size, type and general condition – River Red Gum (<i>Eucalyptus camaldulensis var camaldulensis</i>) - 28 small, 7 medium and 2 large in fair to good health and one medium tree in poor health.			
Total proposed clearance - area (ha) and number of trees	38 scattered trees are proposed to be cleared.			
Level of clearance	Level 4			
Overlay (P and D Code)	Native Vegetation Overlay and State Significant Native Vegetation Overlay			
Map of proposed clearance area				



Mitigation hierarchy	Several alternate locations were dismissed due either more significant impact on vegetation: or an unviable amount of fill required. The chosen site is most
	feasible in terms of construction, access and proximity to existing infrastructure.
SEB Offset proposal	Payment of \$39,276.68

2. Purpose of clearance

2.1 Description

The proponent intends to build a new warehouse on the site, to the southeast of existing buildings. The trees assessed are impacted by the proposal and clearance is required for the construction of the building and ancillary infrastructure.

2.2 Background

The site of the new warehouse exists within the Petaluma viticulture property located at 254 Pfeiffer Road, Woodside amidst the agricultural landscape of the Adelaide Hills. The property comprises areas of planted grape vines, a cellar door and restaurant, associated infrastructure and production facilities, and a large dam within a parcel of mostly cleared land with remnant scattered trees.

The site has functioned as a winery since 1976. Surrounding land use is viticulture, horticulture and agriculture (primarily grazing). An adjacent parcel to the south appears to be remnant native vegetation of approximately 20ha and noted on Naturemaps as *Eucalyptus leucoxylon* Woodland. Future stages of the development are not currently proposed.

2.3 General location maps



Figure 1. Site map



Figure 2. Location map

2.4 Details of the proposal

The proponent plans to build a new warehouse on the site as per the concept plans at Figure 3. The site is fill, grading steeply to natural levels by the two storage tanks and aeration pond south of the proposed warehouse. The 38 trees assessed are impacted because they are within the footprint of the new building; are within potential cut and/or fill excavation; or within 10m of the new building.



Figure 3. Site plan

2.5 Approvals required or obtained

Provide details of the following approvals or applications under the follow legislation, where relevant:

- Native Vegetation Act 1991 this report is in part fulfillment of the requirements of this Act
- Planning, Development and Infrastructure Act 2016 (this application is concurrent with development approval application)
- Environment Protection and Biodiversity Conservation Act 1999 (impacts on MNES) N/A
- National Parks and Wildlife Act 1972 N/A
- Landscapes SA 2019 N/A
- Aboriginal Heritage Act 1988 the site is within a previously disturbed landscape and unlikely to contain any sites or objects of significance. If such are found during works, appropriate advice will be sought prior to further disturbance.

2.6 Native Vegetation Regulation

Regulation 12, Schedule 1; clause 33, House or Buildings

2.7 Development Application information

The proponent intends to submit a development application; however Council has requested further information regarding native vegetation on the site. Development Application No. to be advised in due course.

Zone – Productive Rural Landscape; Overlay – Native Vegetation Overlay and State Significant Native Vegetation Overlay.

3. Method

3.1 Flora assessment

Following a review of background information and databases, a 1.75 hour field survey was undertaken on 25th October 2022 by Jackie Ayre. The scope of works was outlined by the client prior to the field survey and informed by research using NatureMaps and Google Earth. The survey involved a general assessment of the scattered trees on the site, including identification of possible habitat for species of conservation significance.

An online search was undertaken for Environment Protection and Biodiversity Conservation (EPBC) Act "Matters of Environmental Significance" and an interrogation of the Atlas of Living Australia (AoLA) and the BDBSA databases was completed as background to the field assessment. Two threatened plant species were recorded in the database search. None were found on site nor are likely to be present.

3.2 Fauna assessment

A review of databases including the EPBC Act "Matters of Environmental Significance", AoLA and BDBSA was undertaken prior to the site visit to establish fauna species known, or considered likely, to occur at the site. All observations, calls and evidence of presence were recorded as field notes. Bird species were recorded when heard calling, or when observed within, adjacent to, or flying over the site. Evidence of fauna species presence was searched for and recorded when observed. If hollows were found, closer inspection with binoculars was undertaken. Six listed species were recorded within 5km since 1995, see Part 4.2 and Appendix 1 for further details.

Fauna observed onsite were Adelaide Rosella, Galah, Magpie, Magpie-lark, Little Raven, Welcome Swallow, Willie Wagtail. Kangaroo tracks were also noted.

4. Assessment Outcomes

4.1 Vegetation Assessment

General description of the vegetation, the site and matters of significance

- Landform, geography and soils Described as low hills and rises with mainly acid to neutral, sandy to sandy loam texture contrast soil.
 - Landform feature of significance (rivers, creeks, rocky outcrops, etc.) Inverbrackie Creek runs at 250 to 650 m northeast to southwest from the Pfeiffer Road frontage of the site.
 - *General overview of the vegetation under application as a whole* The site contains scattered trees as remnants of Eucalyptus Forest/Woodland.
- General description of the vegetation relating to type and condition Remnant vegetation is represented by scattered trees amidst a predominantly cleared viticulture property amidst a broader agricultural landscape.
- Provide a description of the landscape context for the vegetation
 The scattered trees in this assessment occur as isolated individuals within a predominantly cleared
 agricultural landscape with some remnant native vegetation associations present in isolated pockets and
 along watercourses and creek lines. There are three heritage agreements located within 5 km of the site, with
 the most extensive being adjacent the southern property boundary, with others located approximately
 1.5 km to the northwest and 3.7 km to the southeast. Charleston Conservation Park lies 5 km northeast and
 Kenneth Stirling Conservation Park lies 10 km to the west.

Details of the scattered trees proposed to be impacted



A group of up to 20 juvenile River Red Gums, self-sown from adults nearby. In good condition with no hollows, limited current habitat for threatened species. Removal required for excavation of site, or under Regulation 8(1) within 10m of a building. Loss factor 1.



species. Removal required for construction of the building. Loss factor 1.







required for construction of the building. Loss factor 1.



Tree ID - 7	
Tree spp: Eucalyptus camaldulensis var camaldulensis	
Number of trees - 1	
Height (m) - 12	
Hollows - none visible	
Diameter (cm) - 40	
Canopy dieback (%) - 50	
Total Biodiversity Score - 0.62	Forther 2. The 2, taken facing northwest
threatened species. Removal req	uired for construction of the building. Loss factor 1.







of the building. Loss factor 1.

















Site map showing areas of proposed impact



Figure 4. Showing location of scattered trees assessed

4.2 Threatened Species assessment

Species observed on site, or recorded within 5km of the application area since 1995, or the vegetation is considered to provide suitable habitat

Species (common name)	NP&W	FPB C	Data	Date	Species known	Likelihood of use		
species (common name)	Act	Act	source	of last	habitat preferences	for babitat -		
		ACC	source	record	habitat preferences	Comments		
<i>Biziura lobata menziesi</i> (Musk Duck)	R		3	2007	Favour deep water where they dive for crustaceans, aquatic insects, fish, and amphibians, together with a small quantity	Possible – preferred habitat not on site		
Corcorax melanorhamphos (White-winged Chough)	R		3	2020	Found in open forests and woodlands. They tend to prefer the wetter areas, with lots of leaf-litter, for feeding, and available mud for nest building	Likely – habitat on site and wetter areas nearby with watercourse and many dams in area		
<i>Spatula rhynchotis</i> (Australasian Shoveler)	R		3	2007	Found in all kinds of wetlands, preferring large undisturbed heavily vegetated freshwater swamps.	Possible – preferred habitat not on site		
<i>Stictonetta naevosa</i> (Freckled Duck)	V		3	2003	Prefers permanent freshwater swamps and creeks with heavy growth of cumbungi (bullrushes), lignum or tea-tree.	Possible – preferred habitat not on site		
<i>Pteropus poliocephalus</i> (Grey- headed Flying Fox)	R	VU	3	2019	Feeds in remnant native vegetation patches as well as in urban areas.	Likely – habitat on site		
<i>Trichosurus vulpecula</i> (Common Brushtail Possum	R		3	2022	Found in Eucalyptus and Sheoak woodlands, making their nests (also known as dens) in tree hollows or other dark confined spaces such as hollow logs, dense vegetation.	Likely – habitat on site		
Source; 1- BDBSA, 2 - AoLA, 3 – NatureMaps 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others NP&W Act: F= Endangered, V = Vulnerable, R= Rare								

EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable

Criteria for the likelihood of occurrence of species within the Study area.

Likelihood	Criteria						
Highly	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is						
Likely/Known	present and falls within the known range of the species distribution or;						
	The species was recorded as part of field surveys.						
Likely	Recorded within the previous 20 years, the area falls within the known distribution of the species and the area						
	provides habitat or feeding resources for the species.						
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area						
provide limited habitat or feeding resources for the species.							
	Recorded within 20 -40 years, survey effort is considered adequate, habitat and feeding resources present,						
	and species of similar habitat needs have been recorded in the area.						
Unlikely	Recorded within the previous 20 years, but the area provide no habitat or feeding resources for the species,						
	including perching, roosting or nesting opportunities, corridor for movement or shelter.						
Recorded within 20 -40 years; however, suitable habitat does not occur, and species of similar hab							
	requirements have not been recorded in the area.						
	No records despite adequate survey effort.						

4.3 Cumulative impact

This report covers all remnant vegetation to be impacted by this proposal including building footprints, access, associated infrastructure and Regulation 8(1) clearance within 10m of a building. There are no anticipated subsequent or future stages for this proposal. There is potential for some impact from construction activities on surrounding vegetation, such as dust, but these are considered to be low level, manageable with a water cart, and likely to be of short duration.

4.4 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimize, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

a) Avoidance – outline measures taken to avoid clearance of native vegetation

Several alternate sites were assessed but discounted due to the greater impact on vegetation, or the unviable amount of fill material required, potentially compromising the project's feasibility. The chosen site is the most effective in terms of construction, access and proximity to existing infrastructure.

b) Minimization – if clearance cannot be avoided, outline measures taken to minimize the extent, duration and intensity of impacts of the clearance on biodiversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).

Alternate sites had greater potential impact on vegetation – this site is flat and the most suitable for the location of the warehouse.

- c) Rehabilitation or restoration outline measures taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been degraded, or destroyed by the impact of clearance that cannot be avoided or further minimized, such as allowing for the re-establishment of the vegetation. Clearance is permanent. Revegetation on site is not feasible and a payment into the native vegetation fund will be made in accordance with the required SEB offset.
- d) Offset any adverse impact on native vegetation that cannot be avoided or further minimized should be offset by the achievement of a significant environmental benefit that outweighs that impact. An SEB offset payment will be made in accordance with the offset requirements.

4.5 Principles of Clearance (Schedule 1, *Native Vegetation Act* 1991)

The Native Vegetation Council will consider Principles 1(b), 1(c) and 1(d) when assigning a level of Risk under Regulation 16 of the Native Vegetation Regulations. The Native Vegetation Council will consider all the Principles of clearance of the Act as relevant, when considering an application referred under the *Planning, Development and Infrastructure Act 2016*.

Principle of	Considerations						
clearance							
Principle 1a -	Relevant information						
it comprises a	The assessment is of scattered trees. One remnant species was noted – River Red Gum.						
high level of							
diversity of	Patches; N/A						
plant species	Bushland Plant Diversity Score – N/A						
	Assessment against the principles						
	Seriously at Variance						
	N/A						
	At Variance –						
	NA						
	Moderating factors that may be considered by the NVC						
	N/A						
Principle 1b -	Relevant information						
significance	See Appendix 1 for fauna species list. Six species were listed and assessed for potential to use the						
as a habitat	vegetation. None were observed during the site assessment. Three were considered likely and six						
for wildlife	possible, to find habitat on the site.						
	Detail if the vegetation supports a high diversity of animal species, a corridor for movements						
	between other areas of native vegetation, or a habitat refuge, especially in heavily cleared areas.						
	The vegetation is scattered across mostly cleared land and provides inadequate density to						
	function well as corridors between remnant patches. A substantial remnant patch under heritage						
	agreement is located adjacent the southern property boundary.						
	Trees:						
	Fauna Habitat Score – 1.8						
	Biodiversity Score – ranging from 0.18 (Tree 15) to 7.85 (Tree 10)						
	Assessment against the principles						
	Seriously at Variance						
	All scattered trees assessed are SAV						
	<u>At Variance</u> –						
	N/A						
	Moderating factors that may be considered by the NVC						
	<i>Impact significance</i> – the clearance is unlikely to lead to decline, fragmentation, reduced						
	occupancy, or interfere with recovery of, a threatened species.						
	Non-essential habitat – the impact is confined to non-essential habitat.						
Principle 1c -	Relevant information						
plants of a	Two threatened flora species were historically recorded. None were found on site nor are likely to						
rare,	be present.						
vulnerable or							
	Threatened Flora Score(s) - 0						

endangered	Assessment against the principles						
species	Seriously at Variance						
	N/A						
	<u>At Variance</u> –						
	N/A						
	Moderating factors that may be considered by the NVC						
	N/A						
Principle 1d -	Relevant information						
the	Identify any threatened communities or threatened ecosystems present?						
veaetation	None found						
comprises the							
whole or	Threatened Community Score – N/A						
part of a	Assessment against the principles						
, , plant	Seriously at Variance						
community	N/A						
that is Rare,	Moderating factors that may be considered by the NVC						
Vulnerable or	N/A						
endangered:							
Principle 1e -	Relevant information						
it is	Provide remnancy figures for IBRA Association – Eden Valley 6% and IBRA Subregion – Fleurieu,						
significant as	12%						
a remnant of	Discuss the health and likely longevity of remnants – the remnant vegetation is represented by						
vegetation in	scattered trees only, no understorey species are present. They are generally healthy and most, if						
an area which	otherwise undisturbed, would remain that way for decades. Their location within the expanding						
has been	agricultural and associated tourism area of the Adelaide Hills indicates that their future may not						
extensively	be secure.						
cleared.							
	Total Biodiversity Score – 35.02						
	Assessment against the principles						
	<u>Seriously at variance</u>						
	At Varianco						
	Δt the sub-regional level clearance is ΔV						
	Moderating factors that may be considered by the NVC						
	Impact significance – clearance is not likely to have a significant impact on a remnant						
	Ouality of remnant - the remnant vegetation is scattered trees only, constituting poor quality						
	remnant without understorey species.						
Principle 1f -	Relevant information						
it is growing	The vegetation is not associated with a wetland.						
in, or in							
association	Assessment against the principles						
with, a	Seriously at Variance						
wetland	N/A						
environment.							
	<u>At Variance</u> –						
	N/A						
	Moderating factors that may be considered by the NVC						
	Delevent information						
	<u>Relevant information</u>						

Principle 1g -	The trees are located on private land at the rear of the property and cannot been seen from
it contributes	public land.
significantly	Provide details of cultural or historical values - none evident
to the	Discuss possible effect on landscape character – in the context of the broader property landscape
amenity of	and the large area of remnant vegetation adjacent, the removal of these trees alone will not
the area in	significantly impact the visual character of the landscape.
which it is	
growing or is	N/A
situated.	Moderating factors that may be considered by the NVC
	N/A

4.6 Risk Assessment

Determine the level of risk associated with the application

Total	No. of trees	38
clearance Area (ha)		-
	Total biodiversity Score	35.02
Seriously at va	ariance with principle	1(b).
1(b), 1(c) or 1	(d)	
Risk assessme	nt outcome	Level 4

5. Clearance summary

Scattered trees Summary table

Tree or Cluster ID	Number of trees	Fauna Habitat score	Threatened flora score	Tree or Cluster ID Biodiversity score	Loss factor	SEB Points required	SEB Payment	Admin Fee
1	20	1.8	0	4.09	1	4.30	\$4,348.72	\$239.18
2	1	1.8	0	2.28	1	2.40	\$2,425.45	\$133.40
3	1	1.8	0	1.28	1	1.35	\$1,363.57	\$75.00
4	1	1.8	0	3.61	1	3.79	\$3,836.71	\$211.02
5	1	1.8	0	1.07	1	1.12	\$1,135.49	\$62.45
6	2	1.8	0	2.70	1	2.84	\$2,873.16	\$158.02
7	1	1.8	0	0.62	1	0.65	\$660.84	\$36.35
8	1	1.8	0	2.10	1	2.20	\$2,228.19	\$122.55
9	1	1.8	0	7.39	1	7.76	\$7,859.81	\$432.29
10	1	1.8	0	7.85	1	8.24	\$8,341.53	\$458.78
11	1	1.8	0	0.28	1	0.29	\$296.95	\$16.33
12	1	1.8	0	0.21	1	0.22	\$226.19	\$12.44
13	1	1.8	0	0.22	1	0.23	\$236.51	\$13.01
14	1	1.8	0	0.21	1	0.22	\$218.71	\$12.03
15	1	1.8	0	0.18	1	0.19	\$192.85	\$10.61
16	1	1.8	0	0.30	1	0.31	\$318.73	\$17.53
17	1	1.8	0	0.35	1	0.36	\$368.70	\$20.28
18	1	1.8	0	0.28	1	0.29	\$296.95	\$16.33
Total	38			35.02		36.77	\$37,229.08	\$2,047.60

Totals summary table

	Total Biodiversity score	Total SEB points required SEB Payment		Admin Fee	Total Payment
Application	35.02	36.77	\$37,229.08	\$2,047.60	\$39,276.68

Economies of Scale Factor	0.5
Rainfall (mm)	757

6. Significant Environmental Benefit

A Significant Environmental Benefit (SEB) is required for approval to clear under Division 5 of the *Native Vegetation Regulations 2017*. The NVC must be satisfied that as a result of the loss of vegetation from the clearance that an SEB will result in a positive impact on the environment that is over and above the negative impact of the clearance.

ACHIEVING AN SEB

Indicate how the SEB will be achieved by ticking the appropriate box and providing the associated information:

Pay into the Native Vegetation Fund.

PAYMENT SEB

If a proponent proposes to achieve the SEB by paying into the Native Vegetation Fund, summary information must be provided on the amount required to be paid and the manner of payment:

• Payment amount required (including admin. fee) \$39,726.68

7. Appendices

Appendix 1. Flora and Fauna Species Lists

FAMILY NAME	SPECIES	COMMON NAME	NATIONAL	STATE RATING
COMPOSITAE	Taraxacum cygnorum	Dandelion	VU	
ORCHIDACEAE	Diuris sulphurea	Tiger Orchid		R

CLASS NAME	SPECIES	COMMON NAME	NATIONAL	STATE RATING
AVES	Biziura lobata menziesi	Musk Duck		R
AVES	Corcorax melanorhamphos	White-winged Chough		R
AVES	Spatula rhynchotis	Australasian Shoveler		R
AVES	Stictonetta naevosa	Freckled Duck		V
MAMMALIA	Pteropus poliocephalus	Grey-headed Flying-fox	VU	R
MAMMALIA	Trichosurus vulpecula	Common Brushtail Possum		R

Appendix 2. Scattered Tree Vegetation Assessment Scoresheet

SEB Required for Scattered Trees				(Version - 22 Oct 2021)			
Landscapes Region	H&F			Total Biod	iversity Score	35.02	
Mean Annual Rainfall (mm)	757			Total SEB	Points required	36.77	
Economies of Scale factor	0.5			Payment \$	6 (GST exclusive	\$37,229.08	
				Admin fee	(GST inclusive)	\$2,047.60	
IBRA Association	Eden Valle	у		Total SEB \$ required		\$39,276.68	
Tree Species	Number of	Number of	Number of	Total SEB	Payment in NV	Administration	Total
	Trees	trees	trees	Points	Fund (GST	fee (GST	
	(total)	(proposed removed)	(proposed pruning)	required	Exclusive)	Inclusive)	
Eucalyptus camaldulensis	38	38	0	36.77	\$37,229.08	\$2,047.60	\$39,276.68
0	0	0	0	0.00	\$0.00	\$0.00	\$0.00

