GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7709/1
Permit Holder:	Borona Superannuation Pty Ltd
Duration of Permit:	14 April 2018 to 14 April 2023

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. **Purpose for which clearing may be done**
   Clearing for the purpose of improved access and running of stock.

2. **Land on which clearing is to be done**
   Lot 942 on Deposited Plan 213729, Moorine Rock

3. **Area of Clearing**
   The Permit Holder must not clear more than 24.9 hectares of native vegetation within the area cross-hatched yellow on attached Plan 7709/1.

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

PART II – MANAGEMENT CONDITIONS

5. **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.

6. **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*:
   (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
   (b) ensure that no *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.

PART III – RECORD KEEPING AND REPORTING

7. 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); and
(d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 6 of this Permit.

8. Reporting

(a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
  (i) of records required under condition 7 of this Permit; and
  (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding calendar year.
(b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
(c) Prior to 14 January 2023 the Permit Holder must provide to the CEO a written report of records required under condition 7 of this Permit where these records have not already been provided under condition 8(a) of this Permit.

DEFINITIONS

The following meanings are given to terms used in this Permit:
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 Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or
(c) not indigenous to the area concerned.

Emma Bramwell
A/ MANAGER
CLEARING REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

16 March 2018

Plan 7709/1

Legend

- Areas approved to clear
- lga_201501131742

WANow_Imagery

900 N 900 m

MGA 94
Geocentric Datum of Australia 1994

E BRAMWELL ..... Date 16/03/18

Officer with delegated authority under Section 20
of the Environmental Protection Act 1986

GOVERNMENT OF
WESTERN AUSTRALIA

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7709/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Raymond Borona

1.3. Property details

Property: LOT 942 ON PLAN 213729, BODALLIN
Local Government Authority: YILGARN, SHIRE OF
DWER Region: Goldfields
DBCA District: CENTRAL WHEATBELT
Localities: BODALLIN

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
24.9 (as revised)		Mechanical Removal	improved access and running of stock.

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 16 March 2018
Reasons for Decision: The clearing permit application was received on 21 July 2017 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing is not likely to be at variance to the clearing principles.

The Delegated Officer determined that the proposed clearing is not likely to result in any unacceptable environmental impacts, however noted that the proposed clearing may increase the risk of weeds being introduced or spread into adjacent areas. Weed management measures will minimise impacts to adjacent areas.

Site Information

Clearing Description: The application is to clear up to 24.9 hectares of native vegetation Lot 942 on Deposited Plan 213729, Moorine Rock, for the purpose of improved access and running of stock.

Vegetation Description: The application area is mapped as Beard vegetation association 1413, described as shrublands; *Acacia* spp., *Casuarina* spp. and *Melaleuca* spp. thicket

Photos provided by the applicant indicate that the application area comprises of *Acacia* spp. and *Melaleuca* spp. shrublands, consistent with the mapped vegetation association.

Vegetation Condition: Very Good; Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
To
Degraded; Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management (Keighery, 1994).

The majority of the vegetation within the application area is in a degraded (Keighery 1994) condition. Photographs provided by the applicant indicate that the application areas are impacted upon from edging affects with weeds protruding into the application areas.

Soil and Landform Type: The application area is mapped within two land subsystems:

- Tandegin 1 Subsystem (Map Unit 258Ta_1) is described as crestal and upper slope sandplain with weakly expressed, weakly indurated breakaways and colluvial back slopes comprising gravelly yellow sands, earths and gravels (mapped over approximately 40 per cent of the application area); and
- Tandegin 2 Subsystem (Map Unit 258Ta_2) is described as very smoothly undulating sandy Aeolian deposits on uplands located directly south east of valley sources, comprising deep yellow sands and earths with gravels forming from recent lateritsation (mapped over approximately 60 per cent of the application area) (Schoknecht et al., 2004).

Comment: The local area referred to in this assessment is defined as the area within a 20 kilometre radius of the application area. Aerial imagery indicates that the local area retains approximately 30 per cent native vegetation cover.

Figure 1: Map of application area

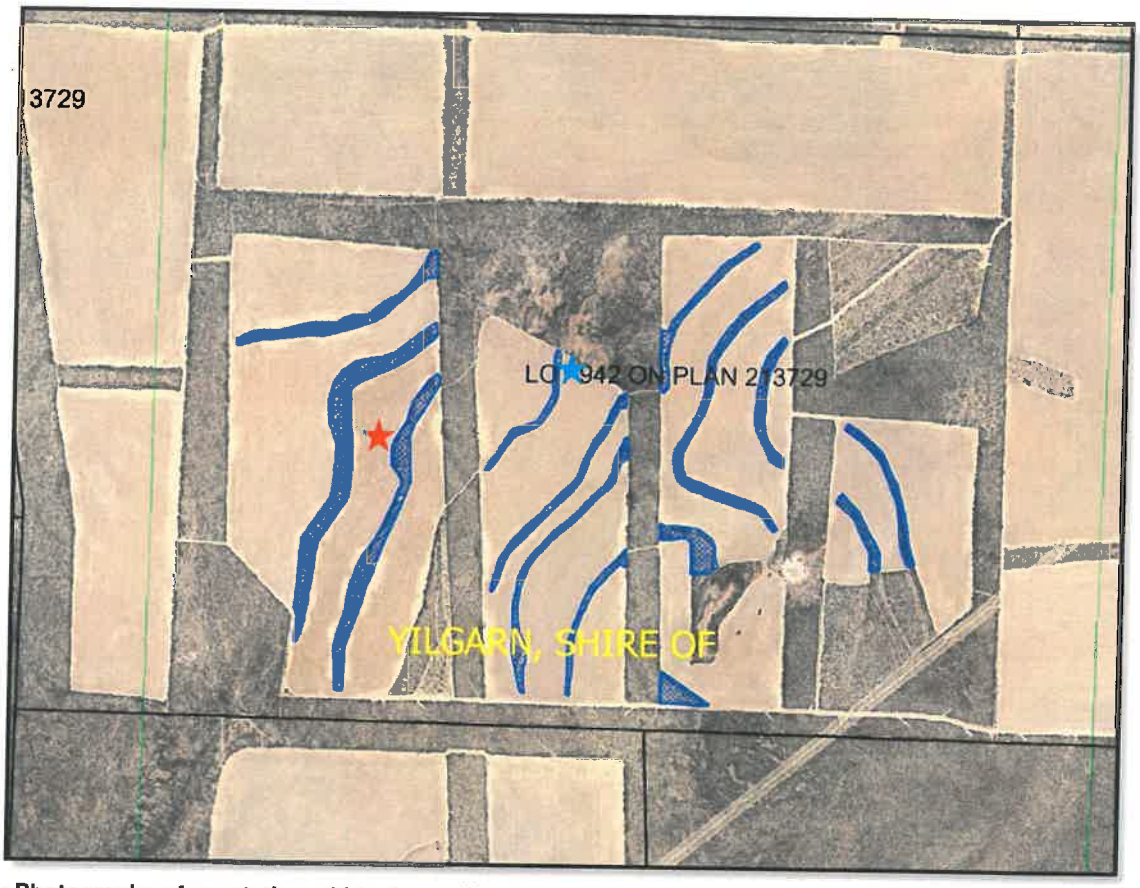

Figure 2: Photographs of vegetation within the application area

Photo 1: Is a representative of the vegetation within the application. Reference point being the blue star

Photo 2: Is a representative of the vegetation within the application. Reference point being the red star

2. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Proposed clearing is not likely to be at variance to this Principle

The application is to clear up to 24.9 hectares of native vegetation within 14 narrow linear bands surrounded land used primarily for agricultural purposes, as indicated in Figure 1.

As discussed in Section 2, the vegetation within the application area comprises shrublands, the majority of which is in a degraded (Keighery, 1994) condition.

According to available databases, the conservation-significant fauna species malleefowl (*Leipoa ocellata*), rainbow bee-eater (*Merops ornatus*), brine shrimp (*Parartemia contracta*) and water flea (*Daphnia jollyi*), have been recorded within the local area. Noting the preferred habitats of these species, and the shape of the application area and the condition of the vegetation within it, the application area is unlikely to comprise significant habitat for these species. Fauna habitat and conservation significant fauna species are discussed under Principle (b).

According to available databases, seven priority flora species and one rare flora species have been recorded within the local area. Of these, six Priority 3 species (being species that are known from several locations and do not appear to be under imminent threat (Jones, 2015)) and one Priority 2 species (being species that are known from generally less than five locations, some of which are on lands managed primarily for conservation (Jones, 2015)) have been recorded from similar same soil types as mapped within the application area, as discussed below. Rare flora are discussed under Principle (c).

- *Acacia crenulata* (Priority 3): bushy shrub or tree, 0.7-three metres high associated with clay, sandy clay, yellow sand; rocky rises, granite outcrops, breakaways;
- *Rinzia triplex* (Priority 3): perennial shrub, one metre high to 0.6 metres wide associated with yellow fine sandy clay loam with lateritic gravel;
- *Verticordia pulchella* (Priority 2): spreading shrub, 0.1-0.45 metres high, to 0.7 metres wide associated with sandy soils over granite; massive granite areas;
- *Stylidium choreanthum* (Priority 3): creeping perennial, herb, 0.01-0.03 metres high, to 0.3 metres wide associated with white/yellow or red sand; plains;
- *Gompholobium cinereum* (Priority 3): shrub, to 0.3 metres high associated with yellow sand, clayey sand, brown loam, sandy gravel, laterite; well-drained open sites, slopes, plains, roadsides;
- *Acacia filifolia* (Priority 3): wispy, spindly, single-stemmed shrub or tree, 1.2-3 metres high associated with yellow sand, gravelly lateritic sand and sandplains; and
- *Banksia horrida* (Priority 3): upright, lignotuberous shrub, 0.6 -1.6 metres high associated with sand, sometimes with gravel (FloraBase website, March, 2018).

Noting the shape of the application area and the condition of the vegetation within it, and the likelihood of edge effects from adjacent agricultural activities, the application area is unlikely to contain the abovementioned priority flora species.

According to available databases, the ecological community 'Eucalypt woodlands of the Western Australian Wheatbelt', listed as Priority 3 by the Department of Biodiversity, Conservation and Attractions (DBCA) and as a threatened ecological community (TEC) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), has been recorded within the local area. TECs are discussed under Principle (d).

Given the above, the application area is unlikely to comprise a high level of biological diversity. The proposed clearing is not likely to be at variance to this Principle.

(b) 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 indigenous to Western Australia.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, one fauna species specially protected under the *Wildlife Conservation Act 1950,* one fauna species protected under international agreement and two priority fauna have been recorded within the local area (DBCA, 2007-). These are malleefowl (listed as rare or likely to become extinct), rainbow bee-eater (protected under international agreement), and brine shrimp and water flea (both listed as Priority 1 by DBCA).

The malleefowl occurs in shrublands and low woodlands that are dominated by mallee vegetation (DotEE, 2015). Based upon the mapped vegetation description and photos supplied by the applicant, the application area is not the preferred habitat of malleefowl.

As discussed under Principle (f), a wheatbelt wetland occurs approximately 60 metres from a section of the application area, however will not be impacted on by the proposed clearing. Noting this, habitat for the brine shrimp and water flea will not be impacted from the proposed clearing.

The rainbow bee-eater habit is not limited to the application area as it can be found throughout mainland Australia. Noting this, the application area is unlikely to comprise significant habitat for the aforementioned conservation-significant fauna species.

DBCA advised that in most cases it would be important to retain strips of vegetation through agricultural land as they offer protection to fauna moving through highly cleared landscapes, however in this case, noting the extent of remnant vegetation surrounding the paddocks within which the application area is located, the narrow strips of vegetation with in the paddocks are of lesser importance than the bordering vegetation (DBCA, 2017).

Given the above, the proposed clearing is not likely to be at variance to this Principle.

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, one rare flora species has been recorded within the local area.

This species favours conditions of granite outcrops with sandy loam soils over granite (FloraBase website, March 2018). On review of photographs of the application area provided by the applicant, the application area is not likely to contain suitable habitat for this species.

Noting the condition of the vegetation within the application area and the extensive weed invasion, the application area is not likely to include, or be necessary for the continued existence of, rare flora including the abovementioned conservation significant species.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

(d) 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.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, the Commonwealth-listed TEC 'Eucalypt woodlands of the Western Australian Wheatbelt' has been mapped approximately 200 metres south west of the application area.

The Approved Conservation Advices for the TEC specifies a number of criteria for vegetation to be considered representative of this TEC (TSSC, 2015). One of these refers to the minimum patch size of two hectares of vegetation being in a good or better condition. Noting this, and the condition of the vegetation and the mapped vegetation type within the application area, the application area is unlikely to comprise the whole or part of, or be necessary for the maintenance of, this or another TEC.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Proposed clearing is not likely to be at variance to this Principle

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).

As indicated in Table 1, the remaining extents of native vegetation within the bioregion is below the 30 per cent threshold, however local government authority and mapped vegetation association are above the 30 per cent threshold.

Aerial imagery indicates that the local area retains approximately 30 per cent native vegetation cover, with large proportion of this vegetation occurring within private property.

Noting the vegetation extents, the application area is unlikely to be significant as a remnant within an extensively cleared area. The proposed clearing is not likely to be at variance to this Principle.

Table 1: Vegetation extents

	Pre-European	Current Extent	Remaining	Current Extent in DCBA Managed Lands	
	(ha)	(ha)	(%)	(ha)	(%)
IBRA Bioregion*					
Avon Wheatbelt	9 517 109	1 763 226	18.5	174 960	10
Local government authority*					
Shire of Yilgarn	3 042 759	2 480 372	81.5	757 286	30
Beard vegetation association*					
1413	546 675	174 102	32	12 762	7

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Proposed clearing is at variance to this Principle

According to available databases, a wheatbelt wetland occurs approximately 60 metres from a section of the application area. The wetland comprises an area of approximately 0.91 hectares and is described as a granite outcrop wetland. Granite outcrop wetlands typically form temporary rock pools of water following rain, and are dry the remainder of the time.

The vegetation within the application area is not growing in or in in, or in association with, an environment associated with a watercourse or wetland.

The proposed clearing is not likely to be at variance to this Principle.

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Proposed is not likely to be at variance to this Principle

As discussed in Section 2, the application area is located within the sandy and gravelly sandy soils of the Tandegin 1 and Tandegin 2 Subsystems (Schoknecht et al., 2004).

The Commissioner of Soil and Land Conservation advised that these map units have a low risk of land degradation in the form of wind erosion, waterlogging, water erosion, flooding, eutrophication and salinity as a result of the proposed clearing (Commissioner of Soil and Land Conservation, 2017).

Given the above, the proposed clearing is unlikely to cause appreciable land degradation. The proposed clearing is not likely to be at variance to this Principle.

(h) 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.

Proposed clearing is not likely to be at variance to this Principle

According to available datasets, two unnamed nature reserves are located 100 metres south and 9.8 kilometres south-west (respectively) of the application area. Noting the presence of agricultural land and adjacent vegetation between the application area and the nearest nature reserve, and the distance to the second nature reserve, the proposed clearing is not likely to impact on the environmental values of nearby conservation areas.

Notwithstanding, the proposed clearing is likely to increase the risk of weeds being introduced into adjacent areas of remnant vegetation. Weed management practices will assist in minimising this risk.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

(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.

Proposed clearing is not likely to be at variance to this Principle

As discussed under Principle (f), no watercourses or wetlands occur within the application area.

The Commissioner of Soil and Land Conservation advised that the proposed clearing is unlikely to contribute to nutrient enrichment of surface and/or groundwater bodies given the soil types present within the application area (Commissioner of Soil and Land Conservation, 2017).

The groundwater salinity within the application area ranges between 500-1,000 total dissolved solids per milligram per litre. The Commissioner of Soil and Land Conservation advised that there were no signs of salinity within the application area, and that no significant changes to groundwater salinity are expected as a result of the proposed clearing (Commissioner of Soil and Land Conservation, 2017).

Given the above, the proposed clearing is unlikely to cause deterioration in the quality of surface or underground water. The proposed clearing is not likely to be at variance to this Principle.

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Proposed clearing is not likely to be at variance to this Principle

The Commissioner of Soil and Land Conservation advised that the risk of flooding occurring as a result of the proposed clearing is low (Commissioner of Soil and Land Conservation, 2017).

Given the above, the proposed clearing is unlikely to cause, or exacerbate, the incidence or intensity of flooding. The proposed clearing is not likely to be at variance to this Principle.

3. Planning instruments and other relevant matters.

The application was originally for the clearing of 63.752 hectares of native vegetation, including a number of intact patches of remnant vegetation contiguous with surrounding vegetation and a nature reserve. The Department of Water and Environmental Regulation (DWER) advised the applicant that additional information would be required to inform the assessment of clearing impacts in relation to those patches, including fauna, flora and vegetation surveys. The applicant subsequently requested that the application area be revised to avoid those patches, thereby reducing the clearing size to 24.9 hectares comprising the linear bands indicated in Figure 1.

The application was advertised on the Department of Water and Environmental Regulation's website on 21 July 2017 for a 21 day public submission period. No submissions were received during this period.

No registered Aboriginal Sites of Significance occur within the application area.

4. References

Commissioner of Soil and Land Conservation (2017) Advice received in relation to Clearing Permit Application CPS 7709/1. Department of Primary Industries and Regional Development (DWER Ref:A1510119).

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

Department of Biodiversity Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Austra'ia's Biodiversity. Department of Parks and Wildlife. URL: http://naturemap.dpaw.wa.gov.au/. Accessed November 2017

Department of Biodiversity Conservation and Attractions (DBCA) (2017) Advice received in relation to Clearing Permit Application CPS 7709/1, November 2017 (DWER ref. A1579699).

Department of the Environment and Energy (DotEE) (2015) 'Leipoa ocellata' in Species Profile and Threats Database, Department of the Environment, Canberra.

Government of Western Australia (2018). 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Parks and Wildlife, Perth.

Jones, A. (2015) Threatened and Priority Flora List, 11 November 2015. Department of Parks and Wildlife: Kensington, WA.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.
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.
Threatened Species Scientific Committee (TSSC) (2015). Approved Conservation Advice (including listing advice) for the Eucalypt Woodlands of the Western Australian Wheatbelt. Department of the Environment, Canberra. Available from: http://www.environment.gov.au/biodiversity/threatened/communities/pubs/128-conservation-advice.pdf

GIS Databases:

- Aboriginal Sites of Significance
- DBCA Estate
- Groundwater salinity
- Hydrography, linear
- Remnant vegetation
- SAC bio datasets (accessed March 2018)
- Soils, Statewide
- Topographic contours
- Wheatbelt Wetlands