



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4913/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Antonio Fiorenza

1.3. Property details

Property: LOT 409 ON PLAN 101944 (House No. 1033 MAYFIELD WAROONA 6215)
Local Government Area: Shire of Waroona
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4.5		Mechanical Removal	Grazing & Pasture

1.5. Decision on application

Decision on Permit Application: Refuse
Decision Date: 6 February 2014

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Mapped Beard Vegetation: 968 - Medium woodland; Jarrah, marri & wandoo (Shepherd et al, 2001).	The application is to clear 4.5 hectares within Lot 409 on Plan 101944, Mayfield, Shire of Waroona for the purpose of grazing and cropping.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The vegetation under application consists of Melaleuca raphiophylla, Hakea varia, with a ground cover of scattered scrubs and sedges (DEC, 2012). The application area appears to be subjected to grazing with a large presence of weed species. The vegetation under application is considered to be in a completely degraded to good (Keighery, 1994) condition (DEC, 2012), with majority of the vegetations condition to be completely degraded to degraded (Keighery, 1994).
Heddele Vegetation Complex: Serpentine River Complex - Closed scrub of Melaleuca species and fringing woodland of Eucalyptus rudis (Flooded Gum) - Melaleuca raphiophylla (Swamp Paperbark) along streams (Heddele, et al, 1990).		To Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The condition of the vegetation under application was obtained from a site inspection conducted on the 16 April 2012 by the former Department of Environment and Conservation (DEC).

3. Assessment of application against clearing principles

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

Comments

Proposal is not likely to be at variance to this Principle

The application is to clear 4.5 hectares for the purpose of grazing and cropping. The application area is located approximately 6.5km north west of the Waroona townsite. The vegetation under application consists of Melaleuca raphiophylla, Hakea varia, with a ground cover of scattered scrubs and sedges (DEC, 2012). The majority of the vegetation under application is in a completely degraded to degraded (Keighery, 1997) condition (DEC, 2012), with small pockets of vegetation (less than 10 percent of the application area) being in a good (Keighery, 1994) condition (DEC, 2012). The application area is subjected to cattle grazing and has a high amount of weeds present. The applicant has advised the proposed clearing only consists of shrubs, bull rushes and dead trees (Fiorenza, 2012).

A 10 kilometre radius surrounding the application area shows there is approximately 15 percent of native vegetation remaining. The application area is mapped as comprising of Beard vegetation association 968 and

Hedde Vegetation Complex, Serpentine River Complex. Both the mapped vegetation complexes are poorly represented within the Swan Coastal Plain.

Approximately 50 percent of the area under application is mapped as a resource enhancement wetland. Resource enhancement wetlands are priority wetlands with the objective for management, restoration and protection towards improving their conservation value (Water and Rivers Commission 2001). The majority of the vegetation within the application is in a completely degraded to degraded (Keighery, 1994) condition (DEC, 2012). Another Resource enhancement wetland occurs approximately 50 metres to the west of the application, the vegetation in this area is in a better condition than the mapped resource enhancement wetland within the applied area.

Given the condition of the vegetation under application and the past disturbance from cattle grazing, it is considered that the clearing area does not have a high biological diversity value. Therefore the application is not at variance to this principle.

Methodology References
- DEC (2012)
- Fiorenza (2012)
- Keighery (1994)
- Water and Rivers Commission (2001)
GIS Databases
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain

(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.

Comments Proposal is not likely to be at variance to this Principle

There have been eight fauna species of conservation significance recorded within a 10 kilometre radius of the application area. The most notable are, *Myrmecobius fasciatus* (Numbat), *Calyptorhynchus banksii* subsp. (Forest red-tailed black cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo) and *Calyptorhynchus latirostris* (Carnaby's cockatoo).

A site inspection undertaken by the former DEC (DEC, 2012) observed kangaroos moving through the application area. No other fauna species were observed and given that the majority of the application area is in a completely degraded to degraded (Keighery, 1997) condition (DEC, 2012), it is not likely that the application area provides significant habitat for fauna of conservation significance.

The application is not likely to be at variance to this principle.

Methodology References
DEC (2012)
Keighery (1994)

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

Comments Proposal is not likely to be at variance to this Principle

Within a 10 kilometre radius of the area under application there is one threatened flora species mapped. This species is a tufted perennial slender herb that dies back to a rhizome over the summer months and occurs in winter-wet claypans (Brown et al, 1998).

This species has been mapped as occurring approximately 3.7 kilometres east of the application area within the same mapped Beard vegetation type as the application area. However the mapped Beard vegetation association is not a representation of the vegetation within the application area, which consisted of *Melaleuca raphiophylla*, *Hakea varia*, with a ground cover of scattered scrubs and sedges. Furthermore the mapped threatened flora species does not occur in the mapped soil and Hedde vegetation complex as the application area.

Given the above, and that the majority of the vegetation under application is in a completely degraded to degraded (Keighery, 1997) condition (DEC, 2012) and is subjected to cattle grazing, it is unlikely that the application area comprises of suitable habitat for the threatened flora species.

The application is not likely to be at variance to this principle.

Methodology References
Brown et al. (1998)
DEC (2012)
Keighery (1994)

GIS Databases

(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.

Comments **Proposal is not likely to be at variance to this Principle**
 The closest Threatened Ecological Community (TEC) to the application area is Floristic Community Type SCP 3a - Eucalyptus calophylla - Kingia australis woodlands on heavy soils, approximately 3.7km west of the application area.

The application area consists of Melaleuca raphiophylla, Hakea varia, with a ground cover of scattered scrubs and sedges (DEC, 2012). There are no species listed in the mapped TEC occurring within the application area. Therefore, the application is not likely to be at variance to this principle.

Methodology DEC (2012)
 GIS Databases
 -SAC Bio Datasets (April 2012)

(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.

Comments **Proposal is at variance to this Principle**
 The vegetation under application is described as Beard vegetation association as 968 which there is approximately seven percent of pre-European extent remaining within the Swan Coastal Plain IBRA bioregion (Shepherd et al, 2001). The vegetation under application is also described as Heddle Vegetation Complex, Serpentine River Complex, which there is approximately eight percent of pre-European vegetation extent remaining (Heddle et al, 1990).

Both the mapped Beard vegetation association and Heddle vegetation complex retain less than the threshold level (30 percent) recommended in the National Objectives Targets for Biodiversity Conservation, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). It should be noted that the Beard vegetation description is not considered to be a true representation of the vegetation identified within the application area.

In addition to the low representation levels of both mapped Beard and the Heddle vegetation complex, the application area occurs within an extensively cleared landscape with approximately 15 percent of native vegetation remaining in the local area (10 kilometre).

Although the majority of the vegetation under application is in degraded to completely degraded condition, there are small pockets of vegetation to be in a good (Keighery, 1994) condition (DEC, 2012). The application is a part of a geomorphic wetland referred to a resource enhancement wetland, which has been identified under the Environmental Protection (Swan Coastal Plain Lakes) Policy 1992 as priority wetlands.

Given this and that the vegetation surrounding the application area has been extensively cleared, along with the vegetation complexes mapped in the application area being underrepresented in the local area, it is therefore considered that the vegetation is significant as a remnant.

The application is at variance to this principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Swan Coastal Plain	1,501,209	587,889	39	33
Shire				
Shire of Waroona	83,231	45,822	55	79
Beard Vegetation Association in Bioregion 968	136,188	9,850	7	15
Heddle Vegetation Complex Serpentine River Complex	19,855	1,727	8	1.5

Methodology References
 - Commonwealth of Australia (2001)
 - DEC (2012)
 - Keighery (1994)
 - Heddle et al (1980)
 - Shepherd et al (2001)

- GIS Databases
- Pre-European Vegetation
- NLWRA, Current Extent of Native Vegetation
- Interim Biogeographic Regionalisation of Australia

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

Comments Proposal is at variance to this Principle

The area under application is within a geomorphic wetland referred to as a palusplain multiple use wetland and a dampland resource enhancement wetland (approximately 50 percent of the application area). Resource Enhancement Wetlands (REW) have been identified as priority wetlands and should be managed with an objective of restoration and protection towards improving their conservation value (Water and Rivers Commission 2001).

A site inspection of the property recorded water dependant vegetation within the application area (DEC, 2012), therefore the application is at variance to this principle.

Methodology

- References
- DEC (2012)
- Water and Rivers Commission (2001)
- GIS Databases
- Hydrography, Linear
- Geomorphic Wetlands Mgt Categories), Swan Coastal Plain

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

Comments Proposal may be at variance to this Principle

The area under application is mapped within soil type Kf9 Low-lying, poorly drained flats with some gilgais: chief soils are black and grey cracking clays (Northcote et al 1960 - 1968).

The area under application is within a geomorphic wetland referred to as a palusplain multi use wetland and a dampland resource enhancement wetland. The vegetation within the application area contains riparian vegetation which has been previously impacted upon through cattle grazing. Approximately 50 metres to the west there is another resource enhancement wetland that is considered to be in a better condition to the one within the application area.

Given the grazing impacts to the area and that the soils are poorly drained, any further clearing or riparian vegetation may result may increase waterlogging. This may affect the hydrological function of the adjacent resource enhancement, consequently reduce the value of the adjacent resource enhancement wetland causing land degradation to the area.

The application may be at variance to this principle.

Methodology

- References
- Northcote et al (1960 - 1968)
- Gis Database
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain

(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.

Comments Proposal is not likely to be at variance to this Principle

The closest conservation area is Buller Nature Reserve occurring approximately 6.5km south of the application area.

The application area is not connected by continuous vegetation to the known conservation area. Given this and the distance to the nature reserve, the application is not likely to be at variance to this principle.

Methodology

- Gis Database
- DEC Tenure

(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.

Comments Proposal may be at variance to this Principle

The area under application is within a geomorphic wetland referred to as a palusplain multi use wetland and a dampland resource enhancement wetland. A site inspection by the former DEC (DEC, 2012) identified riparian

vegetation within the application area, therefore the proposed clearing may cause an increase in sedimentation to the area and subsequently deterioration of surface water.

Given the above, the application may be at variance to this principle .

Cattle grazing and crops within the application area has the potential to increase nutrient and salt levels in the area, potentially entering the nearby Mayfield drain and leach down into the water table.

Any deterioration in the quality in surface and underground water is also likely to occur through the planned agricultural practices.

Methodology GIS Database
-Hydrography, Linear
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain

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

Comments Proposal is not likely to be at variance to this Principle

The area under application is within a geomorphic wetland referred to as a palusplain multi use wetland and a dampland resource enhancement wetland. The area under application is seasonally inundated and subjected to water logging because of the soil types present (black and grey cracking clays (Northcote et al, 1960-68)) which are naturally poorly drained.

The majority of the vegetation under application is in a degraded to completely degraded (Keighery, 1994) condition with small pockets of vegetation (less than 10 percent of the application area) being in a good (Keighery, 1994) condition (DEC, 2012). The removal of this vegetation is not likely to exacerbate or contribute to the incidence or intensity of flooding.

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

Methodology References
- Northcote et al (1960-68)

GIS Database
-Hydrography, Linear
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

The application has received a submission (2012) about the importance of resource enhancement wetlands with concerns that removal of vegetation within these wetlands increases waterlogging and salinity. Furthermore the submission advised that the application contradicts the land management practices encouraged by the landcare movement to protect the few remaining wetlands in the Peel-Harvey Catchment (Submission, 2012).

The submission concerns about increased salinity and waterlogging have been addressed within principle (i) and (j).

The area under application is within the Peel Regional Significant Natural Areas (Peel RSNA's) as outlined in the Environmental Protection Bulletin No. 12 (EPA, 2010). The Environmental Authority (EPA) provide the following advice in relation to the assessment of development proposal and planning schemes which may impact, wholly or in part, on Peel RSNA's. As the selection of these areas was based on previous aerial photography, ground-truthing will be necessary as the values of some areas may have changed (EPA, 2010).

Proposals that may impact on Peel RSNA's will require site specific flora and vegetation surveys to be undertaken compliant with level 2 survey standards as outlined in EPA Guidance Statement 51 and apply the criteria for determination of regionally significant natural areas outlined in EPA Guidance Statement 10 (EPA, 2010).

The Shire of Waroona (2012) has advised that planning consent is not required for the proposal.

Methodology References
- EPA (2010)
- Shire of Waroona (2012)
- Submission (2012)

4. References

Brown A., Thomson-Dans C. and Marchant N.(1998). Western Australia's Threatened Flora, Department of Conservation and

Land Management, Western Australia.

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2012) Site Inspection Report for Clearing Permit Application CPS 4913/1, Lot 409 Mayfield Road, Waroona. Site inspection undertaken 16 April 2012. Department of Environment and Conservation, Western Australia (DEC Ref: A496742).
- Environmental Protection Authority (2010). Environmental Protection Bulletin No. 12. Swan Bioplan ? Peel Regionally Significant Natural Areas.
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- 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.
- Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Shire of Waroona (2012) Direct Interest Submission for clearing permit application CPS 4913/1. Received 30 March 2012, Shire of Waroona, Western Australia (Ref. A489457).
- Submission (2012) Direct Interest Submission for clearing permit application CPS 4913/1. Received 10 April 2012 (Ref. A493115).
- Water and Rivers Commission (2001) Position Statement: Wetlands, Water and Rivers Commission, Perth.