



1. Application details

1.1. Permit application details

Permit application No.: 2558/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Select Harvests Limited

1.3. Property details

Property: LOT 10883 ON PLAN 210796 (CARNAMAH 6517)

Local Government Area: Shire Of Carnamah

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
221		Mechanical Removal	Horticulture

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
The vegetation consists of Beard vegetation association 379: shrublands; scrub-heath on lateritic sand plain (Shepherd et al. 2006).	The area under application is open in parts, yet mainly consists of low closed heath (0.5m to 2m tall) dominated by small trees/shrub species including Calothamnus, Conospermum, Hibbertia hypericoides,, Dryandra and Hakea, with isolated occurrences of Drosera species. Occasionally, scattered emergents to 5m tall such as Nuytsia floribunda and Eucalyptus todtiana can be seen (DEC site visit 2008).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition and description of the vegetation under application was obtained via the use of aerial photography and a site visit (DEC, 2008)

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 at variance to this Principle

The application area is within the Geraldton Sandplains bioregion, which is recognised as containing very high biological diversity. This bioregion is known for proteaceous shrub heaths, rich in endemic species on sandy undulating earths (Desmond and Chant, 2001).

The proposed area is situated near to Tathra and Alexander Morrison National Parks. These national parks are renowned for their diversity of endemic wildflowers. The vegetation in these areas is kwongan which is known to contain over 70% of the species known to South-Western Australia. The application area shares the same soil and vegetation types as those within the nearby Tathra and Alexander Morrison National Parks. Therefore it is likely that the vegetation proposed to be cleared contains similar environmental values.

During a DEC site inspection (2008) it was noted that there was a diversity of species and habitats. The soil type changed progressively from north to south, giving rise to a wide range of flora species and fauna habitats. Some areas of vegetation were quite dense with mature specimens ready to set seed, and other areas were open, allowing for more recruitment and less competition thereby promoting greater diversity. This range of vegetation species and habitat type results in a diversity of fauna species attracted to the property to meet their food, nesting, mating and shelter requirements.

There has been historical grazing and clearing on the property which is likely to have affected the diversity of

species in the short term, however the diversity across the 221 hectares is still considered to be high and the capacity for diverse regrowth was noted during the site inspection (2008).

The applicant is willing to offset the application by placing 824 hectares of native vegetation under reserve and creating an east-west vegetated corridor. The vegetated corridor would be established by re-planting native species and managing pest and weed species. All reserved and re-established areas would be protected from grazing activities. The combined protected vegetation would comprise 42% of the property.

The significance of the vegetation within the application area is as an integral part of a larger consolidated area of native vegetation. The vegetation is currently contiguous with other large tracts of vegetation. Larger areas of vegetation are better situated to protect biodiversity (EPA, 2003).

The clearing proposal is within an area identified by the Environmental Protection Authority (EPA) Position Statement No. 2 (Environmental Protection of Native Vegetation in Western Australia). This position statement was implemented due to high levels of native vegetation clearing which has 'lead to a reduction in biodiversity and increase in land salinisation' (p.7 EPA, 2000), and it was recommended that land within this zone be managed to maintain environmental values. This position statement also stated that 'any further reduction in native vegetation through clearing for agriculture cannot be supported' (p.7 EPA, 2000 & p.13 EPA Bulletin 1105, 2003).

Given the above factors the proposed clearing is at variance to this principle.

Methodology DEC Site Visit (2008)
Desmond and Chant (2001)
EPA (2003)
Keighery (1994)
GIS DataSets:
- Carnamah 50cm Orthomosaic Landgate06

(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 may be at variance to this Principle

The area proposed to be cleared is in 'very good' (Keighery, 1994) condition. The vegetation provides a range of habitats from denser shrub areas, to more open disturbed patches and some patches of Eucalypt and mallee species. This diversity of habitat provides for a wide range of mammals, birds and reptiles, which are likely to utilise the vegetation for food, nesting and cover. The vegetation within the application area is connected with better condition vegetation to the west, and forms a partial link through the landscape to conservation areas.

Within the local area (10km radius) there has been some significant clearing, however there are still some large stands of vegetation remaining. A broader regional view displays a larger cleared environment, which is likely to place habitat pressure on those remaining stands of vegetation. Further clearing in this local and regional area will increase the fragmentation already being displayed, which is likely to affect genetic diversity, and lead to increased competition for habitat and decreased protection from predators.

In Bulletin 1105 (2003) the EPA was of the opinion that the clearing of vegetation in this area would impact on the formation of an integral part of a network of native vegetation remnants that provide connectivity for fauna from and to nearby conservation areas. This assessment was based on an area greater in size to that of the current applied area, however DEC considers that the impact may be comparable to that identified by the EPA.

The applicant has proposed that 824 hectares of native vegetation be protected and managed to improve biodiversity in the area. This will also include the re-establishment of a vegetated corridor, linking the retained vegetation to the west and north of the application area, to potentially restored sites on the east.

Methodology EPA (2003)
DEC site visit (2005)
DEC site visit (2008)
SacBioDataSets(accessed 22/07/08)

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

Comments Proposal may be at variance to this Principle

There is one recorded occurrence of rare flora within the local area (10km radius). *Daviesia speciosa* has been recorded 5km north west of the application area, on the same vegetation and soil types as the area under application and has habitat requirements which may be found within the application area. There are also 34 known priority species in the local area indicating a diversity of poorly known and endemic species.

EPA bulletin 1105 (2003) concluded that there is little available information on plant species within the local area, and that without a specific flora survey of the area, any clearing could impact on the conservation of

biodiversity in the region, therefore, the proposed clearing may be at variance to this principle.

To reduce potential impacts on flora within this area the proponent has proposed that 824 hectares of vegetation will be reserved and managed, and vegetated corridors being established linking western section of retained vegetation to eastern sections.

Methodology EPA (2003)
 SacBioDataSets (accessed 22/07/05)
 GIS DataSets:
 - Carnamah 50cm Landgate06

(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**
 There are no known Threatened Ecological Communities (TECs) located within the local area (10km radius). The application area does not appear to have habitat known to contain TEC's so it is considered unlikely that the proposed clearing comprises or is necessary for a TEC.

Methodology SacBioDataSets (accessed 22/07/08)

(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**

Pre-European	Current extent (ha)	Remaining (ha)	Remaining (%)
IBRA Bioregions			
Geraldton Sandplain	833,981	663,141	42.7
Shire			
Carnamah	287,132	110,758	38.6
Beard Vegetation Complex			
379	547,737	122,098	22.3

Most of the above figures of remaining vegetation, are above those targeted by the Government (EPA, 2000), however, the area does fall within the Intensive Land Use Zone identified within the Environmental Protection Authority (EPA) Position Statement No.2 on Agriculture Regions. This position statement was implemented due to high levels of native vegetation clearing which has 'led to a reduction in biodiversity and increase in land salinisation' (p.7 EPA, 2000), and it was recommended that land within this zone be managed to maintain environmental values.

Vegetation type 379 is below the targeted figure of 30% which indicates that species extinction is believed to occur at an exponential rate (EPA, 2000).

The area proposed to be cleared is in 'very good' (Keighery, 1994) condition, and contains low shrub, banksia woodland and some Eucalypt and mallee species. The importance of the vegetation within the application area can not be assessed only on an individual basis but as a part of a larger consolidated area of native vegetation. Given local and regional land degradation issues, and regional loss of biodiversity, it is likely that clearing the proposed application area would be at variance to this principle.

The proponent has proposed to reserve 824 hectares of native vegetation which will give security to that remnant vegetation. However further clearing is still considered to be unacceptable in an area of already depleted vegetation types (EPA Bulletin 1105, 2003).

Methodology Commonwealth (2001)
 EPA (2000)
 EPA (2003)
 Shepherd et al. (2006)
 GIS DataSets:
 -EPA Position Statement No2 Agriculture Region (01/12/00)

(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 not likely to be at variance to this Principle

No watercourses or wetlands occur within the area under application. The closest watercourse is located 2.7km north west. The proposed clearing is not considered to be at variance to this principle.

Methodology EPA (2003)

GIS DataSets:

- Rivers
- Hydrography, linear (13/07/06)
- Calm Managed Lands and Waters (01/11/03)

(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 Department of Agriculture and Food Western Australia (DAFWA) previously inspected the site in 2004 and noted that there were no obvious or insurmountable land degradation problems. This inspection was done with respect to another application, which involved clearing the land for cropping over the same area as the current proposal. The soils are mapped as Wd9 and loosely described as undulating terrain with sandy soils and lateritic material (Northcoate et al. 1960-1968).

Wind erosion is likely to occur given the sandy soils, elevated topography in some areas and lack of a vegetated buffer.

The area proposed to be cleared also lies within the Moore River Catchment. This catchment has approximately 15% of the original vegetation remaining (EPA 2003).

Clearing 221 ha would result in an increased recharge. Salinity levels in the local area (10 km radius) are currently low, being mapped at 500-1000 TDS mg/L. DAFWA (2008) have advised on a neighbouring application that the risk of rising salinity levels from this increased recharge is unknown.

The proposed clearing of 221 hectares of native vegetation may be at variance to this principle.

Methodology EPA (2000)

EPA (2003)

DAWA (2004) Trim Ref:GD308

Northcote et al. (1960 -1968)

GIS DataSets

- Groundwater salinity (13/07/06)

(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 may be at variance to this Principle

The application area forms part of the connecting vegetation between two National Parks in the regional area. The two National Parks, Alexander Morrison and Tathra, are partly linked by vegetation. This linkage is important for the flow of genetic diversity and species diversification.

Bulletin 1105 (EPA, 2003) advised that clearing vegetation in this area would impact on an integral network of native vegetation remnants which provide connectivity for flora and fauna to nearby conservation areas. The current application area is smaller than that assessed in Bulletin 1105 (EPA, 2003) however DEC considers that the impact may be comparable to that identified by the EPA.

Clearing 221 ha of vegetation within the application area is likely to minimise the habitat available for use in this corridor and increase habitat competition within the conservation reserves. The proposed clearing will increase fragmentation in the local area and reduce the size of remaining fragments.

The proponent has offered to offset the clearing proposal with the reservation of 824 ha of native vegetation. This would assist in the maintenance of an ecological corridor; however DEC considers that the removal of 221 ha may still have an impact on the environmental values of nearby conservation areas.

Methodology EPA (2003)

GIS DataSets:

- Calm Managed Lands and Waters(01/11/03)

(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 proposed to be cleared lies within the Moore River Catchment. This catchment has approximately 15% of the original vegetation remaining (EPA 2003), and any further clearing may result in an increased risk of salinity (EPA 2000).

Clearing 221 ha of native vegetation would result in an increased recharge. Salinity levels in the local area (10 km radius) are currently low, being mapped at 500-1000 TDS mg/L. DAFWA (2008) have advised on a neighbouring application that the risk of rising salinity levels from this increased recharge is unknown.

The proposed clearing is not nearby to any wetlands or watercourses and is not likely to increase sedimentation, erosion or turbidity.

Methodology EPA (2000)
EPA (2003)
GIS DataSets:
- Hydrographic catchments, catchments (01/06/07)

(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 clearing of 221 ha of native vegetation will result in an increased recharge. However, the fine sands and undulating plains within the application area are unlikely to retain sufficient water, or increase surface runoff so as to result in a flood event. The proposed clearing is unlikely to be at variance to this principle.

Methodology DEC site visit (2008)
GIS DataSets:
- Soils, statewide (30/11/99)

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

Comments

Past applications over the same area have been assessed by the EPA and DEC, and were refused.

The EPA refusal, Bulletin 1105 (EPA, 2003), was for a larger area (610 hectares) but included the area under application. The refusal was based on the proposal not meeting the EPA's objectives for nature conservation and biodiversity, and it was considered that it would lessen the local catchment restoration efforts. The EPA also stated that it was inconsistent with the Governments Bush Heritage Trust commitment to achieve the national goal of reversing the long term decline in the quality, and extent, of Australia's native vegetation cover.

The current proposal and the proposal submitted for CPS 340/1 are considered to be related to the proposal submitted to the EPA which was refused by the minister. Under section 51 (F) of the Environmental Protection Act 1986, the decision maker has the ability to refuse CPS 2558.

The proponent has indicated that they are willing to offset 824 of native vegetation under a conservation covenant (DOC58278 & DOC60654) and create a corridor between the east and west side of the property.

Methodology EPA (2003)
GIS DataSets:
- Native Title

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is at variance to Principles (e) and (a), may be at variance to Principles (b), (c), (g), (h) and (i) and is not likely to be at variance to the remaining principles.

5. References

- Commonwealth of Australia (2001) National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, Canberra.
- DEC site inspection report (2008) Trim Ref: DOC58405
- DEC site visit inspection report (2005) Trim Ref:GD 278
- Department of Agriculture and Food (2004) Advice. Commissioner of Soil and Land Conservation. DEC TRIM Ref: DOC58960.
- Department of Conservation and Land Management (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions.

- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No 2. December 2000. Environmental Protection Authority.
- EPA 2003, Clearing of up to 950 hectares of native vegetation for agriculture: Victoria Location 10883 Shire of Carnamah, Bulletin 1105, Environmental Protection Authority.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001a) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia (updated 2006).

6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)