

Clearing Permit Decision Report

1. Application details

Permit application details

Permit application No.:

6422/1

Permit type:

Area Permit

Applicant details

Applicant's name:

Seaton Engineering Pty Ltd

Shire of Dandaragan

Property details

Property:

Lot 10320 on Deposited Plan 206636, Boothendarra

Local Government Authority: DER Region:

Midwest

DPaW District:

Moora

LCDC: Localities:

Dandaragan Boothendarra

Application

Clearing Area (ha)

No. Trees

Method of Clearing

For the purpose of:

Mechanical Removal

Agricultural activities

Decision on application

Decision on Permit Application:

Decision Date:

Refuse

Reasons for Decision:

20 June 2016 The applicant has applied to clear 469 hectares of native vegetation.

The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 510 of the Environmental Protection Act 1986.

The Delegated Officer determined that the proposed clearing is at variance to Principles (a) and (b), may be at variance to Principles (c), (e), (g) and (h), and is not likely to be or is not at variance to the remaining Principles. The Delegated Officer determined that the proposed clearing will impact on significant habitat for indigenous fauna (particularly for Carnaby's cockatoo and potentially for malleefowl), may impact on threatened and priority flora, may impact on an ecological corridor, and may cause land degradation in the form of wind erosion between clearing and pasture/cropping establishment.

2. Site Information

Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Beard Vegetation Association 1031 is described as a mosaic of shrublands; hakea scrub-heath / Shrublands; banksia heath (Shepherd et al., 2001).

Clearing Description Clearing of 469 hectares within Lot 10320 on Deposited Plan 206636, Boothendarra, for the purpose of agriculture.

Vegetation Condition Excellent; Vegetation

structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

To:

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994)

Comment

The condition and structure of the vegetation under application was obtained from a site inspection undertaken by officers of the Department of Environment Regulation on 16 January 2015.

The vegetation under application consists predominantly of an open heathland of Xylomelum sp. with emergent Eucalyptus todtiana. The midstorey vegetation consists of Melaleuca spp., Hakea spp., Allocasuarina humilis, Banksia sp., Grevillea spp. and the ground cover comprised of Amphipogon sp., Kennedia prostrata, Neurachne sp., Austrostipa sp. and Triptococcus sp. (DER, 2015).

Few weed species are present (DER, 2015). Approximately three quarters of the application area was burnt in 2011, however the vegetation is regenerating (DER, 2015).

3. Assessment of application against clearing principles

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

Comments Proposed clearing is at variance to this Principle

The application is to clear 469 hectares of native vegetation within Lot 10320 on Deposited Plan 206636, Boothendarra, for the purpose of agriculture. The vegetation under application is in a good to excellent (Keighery, 1994) condition (DER, 2015) with approximately three quarters of the application area having previously been impacted upon by fire in 2011, however the vegetation is regenerating well.

According to available databases, no threatened or priority ecological communities are mapped within the local area (defined as a 20 kilometre radius around the application area).

Several priority and nine rare flora species have been recorded in the local area. The application area is located within the Lesueur Sandplain subregion of the Geraldton Sandplain bioregion, known for its extremely high floristic endemism with over 250 species of sandplain flora endemic to this subregion (Desmond and Chant, 2002). The area is also known Australia-wide and internationally as having particularly high floristic diversity and levels of endemism (Desmond and Chant, 2002). Noting the extent of the proposed clearing and the good to excellent (Keighery, 1994) condition of the vegetation under application, and the connectivity of the application area to Boothendarra Nature Reserve, it is considered that the application area may include suitable habitat for rare and priority flora.

Several fauna species of conservation significance have been recorded within the local area. Carnaby's cockatoo (*Calyptorhynchus latirostris*) forages on the seeds, nuts and flowers of a large variety of plants including proteaceous species (*Banksia*, *Hakea*, *Grevillea*), as well as *Allocasuarina* and *Eucalyptus* species, *Corymbia calophylla* and a range of introduced species (Valentine and Stock, 2008). This type of vegetation is present within the application area (DER, 2015). The habitat types within the application area and areas connected to it is considered to be suitable habitat for malleefowl (Parks and Wildlife, 2015a). The application area is likely to utilised by malleefowl for foraging and traversing, and as it further regenerates from the impacts of the 2011 fire the application area is also likely to be utilised for nesting in the future (Parks and Wildlife, 2015a).

The application area is part of a vegetated corridor that connects the Boothendarra Nature Reserve to the Watheroo National Park. Removal of this vegetation may impact on fauna movement between the two conservation areas by fragmenting the east-west linkage that supports biodiversity values of the local area.

Noting that the application area contains habitat for significant fauna, supports fauna movement between conservation areas, and may contain rare and priority flora species, it is considered that the vegetation under application comprises a high level of biodiversity.

The applicant submitted the following additional advice in respect to this Principle:

- The assessment appears to incorrectly consider the application area as being of the Boothendarra type, which is contained within the 'agreement to reserve' areas. The application area is more like the Beltara type, which is predominant in the local area and has 60 per cent remaining.
- The assessment refers to the application area being in good to excellent condition. This condition refers to vegetation contained within the 'agreement to reserve' areas but not within the application area.
- The assessment refers to rare and priority flora species recorded within a 20 kilometre radius. These species are associated with different vegetation associations than that found within the application area. Lateritic breakaways and gravelly lateritic soils are contained within the 'agreement to reserve' areas but not within the application area.
- Based on anecdotal advice Wubin is likely to be the nearest habitat for malleefowl.
- The 'good book' states that a corridor should be a minimum of 200 metres wide. A wide corridor of vegetation running east-west has been retained along the northern boundary of the property. The benefit of retaining a 1,300 metre corridor running north-south to maintain east-west connectivity is unclear.

The Commissioner of Soil and Land Conservation advised that the soils within the application area are mainly described as pale and yellow deep sands with some sandy earths, sandy gravels and some playa soils, supporting a mixture of banksia (nee dryandra) health, patches of mallee and banksia with the occasional *Eucalyptus todtiana* (CSLC, 2015).

One rare and a number of priority flora recorded within the local area are associated with yellow/grey sands and a vegetation type similar to that found within the application area. Noting this information and that the lateritic breakaways and gravelly lateritic soils are not contained within the application area, the proposed clearing may still include suitable habitat for one rare and a number priority flora species.

Taking into account the applicant's advice, and noting the extent of the proposed clearing, the presence of habitat for endangered Carnaby's cockatoo, the location of the application area within a vegetated corridor connecting two conservation areas, and the possibility that the application area may include suitable habitat for a species of rare and a number of priority flora species, it is considered that the application area comprises a high level of biodiversity.

Given the above, the proposed clearing is at variance to this Principle.

CPS 6422/1, 20 June 2016 Page 2 of 10

Methodology

References: DER (2015)

Desmond and Chant (2002)

Keighery (1994)

Parks and Wildlife (2015a) Valentine and Stock (2008)

GIS Databases:

- NLWRA, Current Extent of Native Vegetation
- SAC BioDatasets (Accessed January 2015)

(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 Proposed clearing is at variance to this Principle

Three fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* (WC Act) have been recorded within the local area (20 kilometre radius), the species being Carnaby's cockatoo (*Calyptorhynchus latirostris*), Grey Falcon (*Falco hypoleucos*) and Malleefowl (*Leipoa ocellata*) (DPaW 2007-).

The grey falcon inhabits inland drainage systems favouring acacia shrublands that are crossed by tree-lined watercourses with its preferred nests usually within the tallest trees along a watercourse (Birdlife International, 2012) There are no watercourses on site, and no major watercourses with large trees within close proximity to the site (DER, 2015), the application areas are not likely to provide significant habitat for this species.

The malleefowl occurs in shrublands and low woodlands that are dominated by mallee vegetation (DotE, 2015). Due to a significant decline in numbers, the species is now listed as rare or likely to become extinct under the WC Act and vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. This decline has resulted from loss of vegetation due to clearing for agricultural purposes, fox predation and the degradation of habitat by fire (DotE, 2015). Malleefowl require a sandy substrate and abundance of leaf litter to build mounds for roosting purposes (DotE, 2015).

Noting the extent of the proposed clearing, the connectivity of the application area with other areas of vegetation including Boothendarra Nature Reserve, and the habitat types present within the application area, it is considered that the application area may include suitable habitat for malleefowl (Parks and Wildlife, 2015a). A site inspection conducted by DER officers identified that approximately three quarters of the application area has been impacted upon from a fire (DER, 2015) which may preclude recent malleefowl activity in the application area (Parks and Wildlife, 2015a). However, the vegetation is regenerating and is likely to be utilised by malleefowl for foraging and traversing, and as the vegetation further regenerates it is also likely to be utilised for nesting in the future (Parks and Wildlife, 2015a).

The application area has been mapped as a confirmed breeding area for Carnaby's cockatoo. Breeding habitat is defined as trees of species known to support breeding within the range of the species which either have a suitable nest hollow or are of a suitable diameter at breast height (DBH) to develop a nest hollow. For most tree species, suitable DBH is 500 millimetres (Commonwealth of Australia, 2012). For Carnaby's cockatoos the entrance to hollows must have a minimum diameter of at least 100 millimetres to be suitable (DEC 2010). A site inspection of the application area determined that the trees proposed to be cleared are not suitable for breeding purposes for Carnaby's cockatoo (DER, 2015).

The vegetation under application is considered to be suitable foraging habitat for Carnaby's cockatoo. These birds forage on seeds, nuts and flowers of a large variety of plants including proteaceous species (*Banksia*, *Hakea*, *Grevillea*), as well as *Allocasuarina* and *Eucalyptus* species, *Corymbia calophylla* and a range of introduced species (Valentine and Stock, 2008). Extensive areas of the abovementioned listed foraging species for Carnaby's cockatoos were observed within the application area, therefore the application area represents significant foraging habitat for the species (DER, 2015).

The vegetation under application is part of an east-west vegetated corridor that supports fauna movement between Boothendarra Nature Reserve and Watheroo National Park. Reduction of the corridor will impact on the dispersal of native fauna through edge effects, thereby reducing the integrity of the corridor.

Given the large size and good to excellent (Keighery, 1994) condition of the vegetation under application and its contribution to an ecological linkage, the vegetation under application represents significant habitat for fauna.

The applicant submitted the following additional advice in respect to this Principle:

- The 'good book' states that a corridor should be a minimum of 200 metres wide. A wide corridor of vegetation running east-west has been retained along the northern boundary of the property. The benefit of retaining a 1,300 metre corridor running north-south to maintain east-west connectivity is unclear.
- Based on anecdotal advice Wubin is likely to be the nearest habitat for malleefowl.
- Photographs of the existing cleared areas and the Dowdell Atkins Plan show mini corridors approximately 200 metres apart.

Aerial imagery indicates that the existing corridors referred to in the applicant's response (located outside the application area) are on average between 10-50 metres wide and are spaced approximately 230-300 metres apart. It is considered that in terms of maintaining biodiversity values, a corridor of less than 50 metres in width is unlikely to remain viable in the long term in the absence of ongoing management due to the impacts of edge effects from adjacent landuses.

Taking into account the applicant's advice, and noting the extent of the proposed clearing, fauna records within the local area, from within sites with similar habitats as those found within the application area, the presence of significant foraging habitat for endangered Carnaby's cockatoo and potential habitat for malleefowl, and the location of the application area within a vegetated corridor connecting two conservation areas, it is considered that the application area comprises significant habitat for indigenous fauna.

Given the above, the proposed clearing is at variance to this Principle.

Methodology

References:

Birdlife International (2012)

Commonwealth of Australia (2012)

DEC (2010) DER (2015) DotE (2015) DPaW (2007-) Keighery (1994) Parks and Wildlife

Parks and Wildlife (2015a) Valentine and Stock (2008)

GIS Databases:

- SAC BioDatasets (Accessed January 2015)

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

Comments

Proposed clearing may be at variance to this Principle

Several rare flora species have been recorded within the local area (20 kilometres radius). Of the rare flora species identified it is considered that seven rare flora species could occur within the application area. This assumption is based on the lateritic breakaways and gravelly lateritic soils that occur within the south west section of the proposed clearing (Parks and Wildlife, 2015b). The seven species recorded are associated to lateritic breakaways and gravelly lateritic soils (Parks and Wildlife, 2015b).

An additional rare flora species could also occur within the application area. The species is associated with yellow/grey sands and has been recorded within *Xylomelum* sp. and *Eucalyptus todtiana* dominated vegetation in the Alexander Morrison National Park approximately 20 kilometres northwest of the application area (Parks and Wildlife, 2015b). Sections of the application area comprises of this type of habitat (DER, 2015).

Given the potential for rare flora species to occur in the application area, a Level 2 targeted flora survey for threatened flora is required, undertaken in accordance with EPA Guidance Statement 51.

The applicant submitted the following additional advice in respect to this Principle:

The assessment refers to rare and priority flora species recorded within a 20 kilometre radius. These
species are associated with different vegetation associations than that found within the application area.
Lateritic breakaways and gravelly lateritic soils are contained within the 'agreement to reserve' areas but
not within the application area.

The vegetation under application consists predominantly of an open heathland of *Xylomelum occidentale* and sparse emergent of *Eucalyptus todtiana* and mallee in a good to excellent (Keighery, 1994) condition (DER, 2015).

The Commissioner of Soil and Land Conservation (CSLC) advised that the soils within the application area are mainly described as pale and yellow deep sands with some sandy earths, sandy gravels and some playa soils, supporting a mixture of banksia (nee dryandra) health, patches of mallee and banksia with the occasional *Eucalyptus todtiana* (CSLC, 2015).

Taking into account the applicant's advice that lateritic breakaways and gravelly lateritic soils do not occur within the application area, noting the vegetation type present within the application area, and noting the CSLC's advice that the soils within the application area include pale and yellow deep sands, it is considered that the application area may include suitable habitat for a species of rare flora described above.

Given the above, the proposed clearing may be at variance to this Principle.

Methodology

References: CSLC (2016) DER (2015)

CPS 6422/1, 20 June 2016 Page 4 of 10

Parks and Wildlife (2015b)

GIS Databases:

- SAC BioDatasets (Accessed February 2015)

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

According to available databases, no threatened ecological communities are mapped within the local area (20 kilometre radius). On this basis it is considered that the proposed clearing is not likely to comprise the whole or part of, or be necessary for the maintenance of a threatened ecological community.

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

Methodology

GIS Databases:

- SAC BioDatasets (Accessed February 2015)

(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 Proposed clearing may be at variance to this Principle

The vegetation under application is mapped as Beard vegetation association 1031 of which there is 35 per cent of pre-European extent remaining within the Geraldton Sandplains bioregion (Government of Western Australia, 2014).

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). Beard vegetation association 1031 is above the 30 per cent threshold.

The local area (20 kilometre radius) retains approximately 50 per cent native vegetation. The Geraldton Sandplains IBRA Bioregion and the Shire of Dandaragan retain 45 and 44 per cent respectively of their pre-European vegetation extent (Government of Western Australia, 2013). The vegetation under application is part of a vegetated corridor that connects the Boothendarra Nature Reserve to the Watheroo National Park and other areas of remnant vegetation in the local area. Removal of this vegetation may have an adverse impact on fauna movement between the two conservation areas.

The application area is within the agricultural area defined in EPA Position Statement No. 2 which states that significant clearing of native vegetation has already occurred on agricultural land leading to a reduction in biodiversity and increase in land salinisation (EPA, 2000). The EPA recommends that all existing native vegetation be protected from passive clearing through grazing by stock or clearing by other means.

Given the extent of vegetation remaining in the Shire, bioregion and mapped vegetation type, the local area is not considered to be extensively cleared. However given the application area contains significant fauna habitat, may contain rare and priority flora, and contributes towards an ecological linkage, it is considered to be a significant remnant.

The applicant submitted the following additional advice in respect to this Principle:

- The assessment appears to incorrectly consider the application area as being of the Boothendarra type, which is contained within the 'agreement to reserve' areas. The application area is more like the Beltara type, which is predominant in the local area and has 60 per cent remaining.
- The assessment refers to the application area being in good to excellent condition. This condition refers to vegetation contained within the 'agreement to reserve' areas but not within the application area.
- The 'good book' states that if a Shire has less than 20 per cent vegetation remaining then no further clearing will be supported.
- The 'good book' states that a corridor should be a minimum of 200 metres wide. A wide corridor of
 vegetation running east-west has been retained along the northern boundary of the property. The benefit
 of retaining a 1,300 metre corridor running north-south to maintain east-west connectivity is unclear.
- Photographs of the existing cleared areas and the Dowdell Atkins Plan show mini corridors approximately 200 metres apart.

Aerial imagery indicates that the existing corridors referred to in the applicant's response (located outside the application area) are on average between 10-50 metres wide and are spaced approximately 230-300 metres apart. It is considered that in terms of maintaining biodiversity values, a corridor of less than 50 metres in width is unlikely to remain viable in the long term in the absence of ongoing management due to the impacts of edge effects from adjacent landuses.

Taking into account the applicant's advice, and noting that the application area is located within a mapped Beard vegetation association and local government area that retain more than the 30 per cent threshold of pre-European extents respectively, it is considered that the application area is not located in an area that has been

extensively cleared. However, noting the extent of the proposed clearing, the presence of habitat for endangered Carnaby's cockatoo, the location of the application area within a vegetated corridor connecting two conservation areas, and the possibility that the application area may include suitable habitat for a species of rare flora, it is considered that the application area is significant as a remnant.

Given the above, the proposed clearing may be at variance to this Principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregion*				
Geraldton Sandplains	3,136,025	1,410,755	45	40
Local government*			l	
Shire of Dandaragan	670,531	295,860	44	39
Beard Vegetation Associa	tion in Bioregion*			<u> </u>
1031	241,350	83,629	35	41

Methodology

References:

Commonwealth of Australia (2001)

EPA (2000)

Government of Western Australia (2014)

GIS Databases:

- NLWRA, Current Extent of Native Vegetation

(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

Proposed clearing is not at variance to this Principle

According to available databases, the application area does not contain a watercourse or wetland. The closest watercourse to the application is approximately 2.5 kilometres away.

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

Methodology

GIS Databases:

- Hydrography, Linear
- Hydrography, Hierarchy

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

Comments

Proposed clearing may be at variance to this Principle

Four land forms and soil types are mapped over the application area. They are Map unit 222Co_3a (Coalara 3), Map unit 222Co_6c (Coalara 6), Map unit 222Co_5a (Coalara 5) and to a lesser extent Map unit 222Co_7 (Launer 1) (CSLC, 2015). The soils are mainly described as pale and yellow deep sands with some sandy earths, sandy gravels and some playa soils (CSLC, 2015).

The Commissioner of Soil and Land Conservation advised that the risk of land degradation in the form of wind erosion over soil and landform type Coalara 3 as a result of the proposed clearing is high. All other soil and landform types have a low risk of wind erosion occurring from the proposed clearing (CSLC, 2015).

The risk of land degradation in the form of waterlogging, water erosion, flooding, eutrophication and salinity from the proposed clearing is low (CSLC, 2015).

The applicant submitted the following additional advice in respect to this Principle:

The assessment refers to advice provided by the CSLC that indicates that there is a high risk of wind erosion associated with the Coalara 3 map unit. Photographs of the existing cleared areas and the Dowdell Atkins Plan show mini corridors approximately 200 metres apart. The existing cleared areas have no such corridors and have had no problems with erosion over the past 35 years.

Aerial imagery indicates that the existing corridors referred to in the applicant's response (located outside the application area) are on average between 10-50 metres wide and are spaced approximately 230-300 metres apart.

The CSLC advised that the retention of wide-spaced strips of native vegetation to act as windbreaks, coupled with future careful management of plant cover (>50%) and timing of any cultivation, will be sufficient to minimise the risk of wind erosion (CSLC, 2016). The CSLC also advised that the impact of future bushfires (resulting in exposed soils) can be reduced by the construction of carefully sited strategic firebreaks (CSLC,

2016).

Taking into account the applicant's advice, and noting the CSLC's advice in respect to management measures, it is considered that the proposed clearing may cause land degradation in the form of wind erosion in the time between the removal of vegetation and the establishment of crops or pasture.

Given the above, the proposed clearing may be at variance to this Principle.

Methodology

References: - CSLC (2015)

(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

Proposed clearing may be at variance to this Principle

A number of conservation areas occur within the local area (20 kilometre radius). The closest is Boothendarra Nature Reserve, located approximately 190 metres south west of the application area. Watheroo National Park is located approximately six kilometres west of the application area.

The vegetation under application is part of a vegetated corridor that connects the Boothendarra Nature Reserve to the Watheroo National Park. Removal of this vegetation may have an adverse impact on fauna movement between the two conservation areas by reducing the width and further fragmenting the east-west linkage that supports biodiversity values of the local area.

On this basis, it is considered that the proposed clearing may impact a corridor between the Boothendarra Nature Reserve and Watheroo National Park and affect the viability of the reserve and national park to protect biodiversity.

The applicant submitted the following additional advice in respect to this Principle:

 The 'good book' states that a corridor should be a minimum of 200 metres wide. A wide corridor of vegetation running east-west has been retained along the northern boundary of the property. The benefit of retaining a 1,300 metre corridor running north-south to maintain east-west connectivity is unclear.

Taking into account the applicant's advice, and noting that the reduction in corridor width is significant and that the proposed clearing will further fragmenting the east-west linkage it is considered that the application area supports the biodiversity values of nearby conservation areas.

Given the above, the proposed clearing may be at variance to this Principle.

Methodology

GIS Databases:

- Parks and Wildlife 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

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

According to available databases, the application area does not contain a watercourse or wetland. The closest watercourse to the application is approximately 2.5 kilometres away.

The Commissioner of Soil and Land Conservation (CSLC) advised the clearing of 469 hectares is unlikely to contribute to nutrient enrichment of surface and/or groundwater bodies in the applied area given the soil types present within the property (CSLC, 2015).

The groundwater salinity within the application area ranges between 500 - 1000 total dissolved solids per milligram per litre. The CSLC advised that there were no signs of salinity on site or in the general area and no significant changes to groundwater salinity are expected from the clearing (CSLC, 2015).

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

Methodology

References:

CSLC (2015)

GIS Databases:

- Rainfall, Mean Annual
- Hydrography, Linear
- Hydrography, Hierarchy

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

Comments

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

The application area is located at an elevated position in the landscape and slopes to the south west. There are no significant watercourses or wetlands on the property or within the local area (20 kilometre radius). The Commissioner of Soil and Land Conservation advised the risk of flooding occurring on the property from the proposed clearing is low (CSLC, 2015).

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

Methodology

References: CSLC (2015)

GIS Databases:

- Rainfall, Mean Annual
- Hydrography, Linear
- Hydrography, Hierarchy

Planning instruments and other relevant matters.

Comments

In January 1994 the previous landowner submitted a notice of intent to clear native vegetation (NOIC) to the Commissioner of Soil and Land Conservation (CSLC) in accordance with the then requirements under the *Soil and Land Conservation Act 1945*, and entered into an 'Agreement to Reserve' to protect 299 hectares of native vegetation on Lot 10320 in May 1994. Clearing under this NOIC was not carried out, and the NOIC ceased to have effect when the property transferred to the current applicant's ownership.

In November 2011 the former Department of Environment and Conservation received an application to clear 88 hectares of native vegetation on Lot 10320 for the purpose of grazing (CPS 4713/1), however the applicant withdrew the application prior to a decision being made.

The current application to clear 469 hectares of native vegetation on Lot 10320 for agricultural purposes was received on 31 December 2014.

On 26 January 2015 the application was advertised in *The West Australian* newspaper for a period of 21 days. One public submission was received. One public submission was received, which raised concerns about impacts to the area's biodiversity values which include potential impacts to conservation significant flora, fauna and an ecological linkage. These concerns are addressed under Principles (a), (b), (c), (e) and (h).

The application area is located within the Jurien Groundwater *Rights in Water and Irrigation Act 1914* area. Officer-level advice from the Department of Water indicated that there is no pending or existing application by the proponent to take water for the purpose of farming related activities, and that should the applicant intend on drilling a bore or using groundwater for farming purposes they should contact the Geraldton office of the Department of Water to discuss licensing requirements (DoW, 2015).

The application area is zoned 'Rural' under the Shire of Dandaragan's town planning scheme. The Shire of Dandaragan (2014) advised that it has no objection to the proposed clearing.

The application area is located within the agricultural area defined in the Environmental Protection Authority's Position Statement No.2 (2000), which states that significant clearing of native vegetation has already occurred on agricultural land, leading to a reduction in biodiversity and increase in land salinization. Therefore there is a general presumption against clearing within this area for agricultural purposes (EPA, 2000). In exceptional circumstances the EPA would consider supporting clearing for agriculture within this region if:

- There are alternative mechanisms for protecting biodiversity.
- The area to be cleared is relatively small, depending on the scale at which biodiversity changes over the
 area, including extent of vegetation in the surrounding area and recognising that values will vary for
 different ecosystems.
- The proponent demonstrates that the elements set out in Section 4.3 of this Position Statement are being met. This will require extensive local and regional biodiversity work.
- Land degradation, including aquatic environments and threatening processes, such as dieback, salinisation or disruption of catchment processes, on-site and off-site would not be exacerbated.

On 21 April 2015 a Delegated Officer of the Department of Environment Regulation (DER) wrote to the applicant (DER ref. A898033), advising that the preliminary assessment identified a number of significant environmental impacts, and inviting the applicant to provide advice on these matters within 30 days. The timeframe was extended to 30 October 2015. On 21 October 2015 the applicant requested a meeting to discuss the application. A DER Delegated Officer advised the applicant that prior to meeting, a written response addressing the issues raised in the letter of 21 April 2015 is required.

On 25 October 2015 the applicant responded in writing (DER ref. A996060), indicating the view that the assessment findings are incorrect and excessive. The applicant submitted the following:

- The assessment appears to incorrectly consider the application area as being of the Boothendarra type, which is contained within the 'agreement to reserve' areas. The application area is more like the Beltara type, which is predominant in the local area and has 60 per cent remaining.
- The assessment refers to the application area being in good to excellent condition. This condition refers to vegetation contained within the 'agreement to reserve' areas but not within the application area.
- The assessment refers to rare and priority flora species recorded within a 20 kilometre radius. These species are associated with different vegetation associations than that found within the application area. Lateritic breakaways and gravelly lateritic soils are contained within the 'agreement to reserve' areas but not within the application area.
- Based on anecdotal advice Wubin is likely to be the nearest habitat for malleefowl.
- The 'good book' states that a corridor should be a minimum of 200 metres wide. A wide corridor of
 vegetation running east-west has been retained along the northern boundary of the property. The benefit
 of retaining a 1,300 metre corridor running north-south to maintain east-west connectivity is unclear.
- Photographs of the existing cleared areas and the Dowdell Atkins Plan show mini corridors approximately 200 metres apart.
- The 'good book' states that if a Shire has less than 20 per cent vegetation remaining then no further clearing will be supported.
- The assessment refers to advice provided by the CSLC that indicates that there is a high risk of wind
 erosion associated with the Coalara 3 map unit. Photographs of the existing cleared areas and the
 Dowdell Atkins Plan show mini corridors approximately 200 metres apart. The existing cleared areas have

no such corridors and have had no problems with erosion over the past 35 years.

Additional advice was sought from the CSLC regarding the efficacy of retaining corridors of vegetation to mitigate the risk of wind erosion. On 3 March 2016 the CSLC advised that the retention of wide-spaced strips of native vegetation to act as windbreaks, coupled with future careful management of plant cover (>50%) and timing of any cultivation, will be sufficient to minimise the risk of wind erosion (CSLC, 2016). The CSLC's additional advice is considered under Principle (g).

On 16 May 2016 a DER Delegated Officer wrote to the applicant, acknowledging the applicant's response of 25 October 2015, outlining additional advice received from the CSLC, reiterating environmental issues identified in the preliminary assessment, advising of an intent to refuse the application, and offering the applicant an opportunity to meet to discuss the application, provide further information or withdraw the application within 30 days.

On 14 June 2016 the applicant emailed a DER officer to request a further 30 days to respond to the letter, on the basis that they are a small business owner trying to manage a business and need more time to respond.

Methodology

References: CSLC (2016) DoW (2015) EPA (2000)

Shire of Dandaragan (2015)

Submission (2015)

GIS Databases:

- Town Planning Scheme Zones

4. References

BirdLife International 2012. Falco hypoleucos. The IUCN Red List of Threatened Species. Version 2014.3. URL: http://www.iucnredlist.org/. Accessed March 2015.

Commissioner of Soil and Land Conservation (2015) Land Degradation Assessment Report for Clearing Permit Application CPS 6422/1. Site inspection undertaken 20/11/2015. DER Ref A875676.

Commissioner of Soil and Land Conservation (2016) Additional advice received for Clearing Permit Application CPS 6422/1 on 9 March 2016. DER Ref: A1062422.

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra. Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species, Canberra.

Department of Environment and Conservation (2010) Artificial Hollows for Carnaby's Black Cockatoo. An Investigation of the Placement, Use, Monitoring and Maintenance Requirements of Artificial Hollows for Carnaby's Black Cockatoo.

Department of Environment Conservation, Western Australia.

Department of Environment Regulation (2015) Site visit report for clearing permit application CPS 6422/1, 14 January 2015.

Department of Environment Regulation, Western Australia

Department of Parks and Wildlife (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: http://naturemap.dec.wa.gov.au/. Accessed February 2015.

Department of Parks and Wildlife (2015a) Species and Communities Fauna Advice for Clearing Permit Application CPS 6422/1. Department of Parks and Wildlife, Western Australia.

Department of Parks and Wildlife (2015b) Species and Communities Flora Advice for Clearing Permit Application CPS 6422/1.

Department of Parks and Wildlife, Western Australia.

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

Department of Water (2015) Officer-level advice received for Clearing Permit Application CPS 6422/1. Department of Water, Western Australia. DER Ref. A866630.

Desmond, A. and Chant, A. (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002 - Geraldton Sandplain 3 (GS3 - Lesueur Sandplain subregion), 2002, p.293

Environmental Protection Authority (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, Western Australia.

Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.

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. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Shire of Dandaragan (2015) Advice received for Clearing Permit Application CPS 6422/1. DER Ref: A876460. Submission (2015) Submission received in relation to Clearing Permit Application CPS 6422/1. DER Ref: A863746.

Valentine, L.E. and Stock, W. (2008) Food Resources of Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) in the Gnangara Sustainability Strategy Study Area. Edith Cowan University and Department of Environment and Conservation. December 2008.