

**Clearing of approximately 77 hectares of native
vegetation for agriculture, Melbourne Location
926, approximately 27 kilometres east of
Watheroo**

Mr Q R Bricknell

**Report and recommendations
of the Environmental Protection Authority**

**Environmental Protection Authority
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Summary and recommendations

This report provides the Environmental Protection Authority's (EPA's) advice to the Minister for the Environment on the proposal by Mr Q R Bricknell to clear approximately 77 hectares of native vegetation for pasture and cropping at Melbourne Location 926, approximately 27 kilometres East of Watheroo.

The proponent submitted a Notice of Intent to Clear approximately 112 ha of native remnant vegetation in January 2003 to the Commissioner for Soil and Land Conservation. During the assessment of the proposal by the Department of Agriculture Land Conservation Officer the total proposed clearing was revised to 77 ha. It is this proposal that was referred to the EPA and is the subject of this report.

Following consideration by the Inter Departmental Committee under the *Memorandum of Understanding for the protection of remnant vegetation on private land in the agricultural region of Western Australia* (Agriculture WA, 1997), the proposal was referred to the EPA by the Office of the Commissioner of Soil and Land Conservation for consideration of possible environmental impacts on 5 January 2004.

As the proposal appeared unlikely to meet the EPA's environmental objectives, the Authority set the level of assessment for the proposal at Proposal Unlikely to be Environmentally Acceptable (PUEA) in April 2004. At that time a statement of the reasons for the PUEA level of assessment was made publicly available as set out in the EPA's Administrative Procedures for Environmental Impact Assessment.

No appeals were received on the level of assessment. This report is the next stage in the assessment process, which is the EPA's report and recommendations to the Minister for the Environment on the proposal, pursuant to Section 44 of the *Environmental Protection Act 1986*.

Relevant environmental factors

It is the EPA's opinion that 'biodiversity' is the environmental factor relevant to the proposal, which requires evaluation in this report.

Conclusion

This proposal is for clearing of native vegetation within the agricultural area of Western Australia. As indicated in the EPA's Position Statement No. 2 on protection of native vegetation, large-scale clearing of native vegetation has already led to unacceptable impacts on biodiversity and the environment generally. Accordingly, from an environmental perspective any further clearing of native vegetation for agricultural purposes within this area cannot be supported.

At a local and regional scale, the vegetation proposed for clearing appears likely to contain plant species and communities that are depleted, poorly conserved and inadequately represented in secure conservation reserves.

The EPA has concluded that the proposal as put forward by the proponent to clear approximately 77 ha of native vegetation on Melbourne Location 926 for agricultural purposes is environmentally unacceptable as it cannot be managed to meet the EPA's objectives and on the basis of available information, should not proceed.

Recommendations

The EPA submits the following recommendations to the Minister for the Environment:

1. that the Minister notes that the proposal being assessed is for the clearing of approximately 77 ha of native remnant vegetation for agricultural purposes;
2. that the Minister considers the report on the relevant environmental factor as set out in Section 3 of this report;
3. that the Minister notes that the EPA has concluded that the proposal cannot be managed to meet the EPA's objective in relation to biodiversity conservation; and
4. that the Minister notes that the EPA has not included in this Bulletin "conditions and procedures to which the proposal should be subject, if implemented" because the EPA holds the view that the proposal should not be implemented.

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1. References

1. Introduction

This report provides the advice and recommendations of the Environmental Protection Authority (EPA) to the Minister for the Environment on the environmental factors relevant to the proposal by Mr Q R Bricknell to clear approximately 77 ha of native vegetation for pasture and cropping on Melbourne Location 926. The property is located between Carot Well and Merewana Road, approximately 27 kilometres (km) east of Watheroo. Further details of the proposal are presented in Section 2 of this Report.

Under the *Soil and Land Conservation Act 1950* (SLC Act), any landholder wishing to clear greater than 1ha of native vegetation is required to notify the Commissioner of Soil and Land Conservation (the Commissioner). The Commissioner then decides whether to object to the clearing depending on whether or not land degradation is likely to occur and may issue a Soil Conservation Notice to prevent clearing taking place.

The proponent submitted a Notice of Intent to Clear (NOIC) approximately 112 ha of native remnant vegetation at Melbourne Location 926 in January 2003. During the assessment of the proposal by the Land Conservation Officer, the total proposed clearing was revised to 77 ha. It is this proposal that was referred to the EPA and is the subject of this report.

The Commissioner initially objected to the proposed clearing on 1 April 2003 on the grounds of land degradation in the form of salinity which was considered liable to occur. However, following an appeal to the Commissioner by the proponent Mr Q R Bricknell, the proposal was reviewed. Taking into consideration further information provided, the Commissioner concluded that while recharge will likely be increased, the likelihood of further salinity downstream is not certain.

The proposal was then considered by the Inter Departmental Committee (IDC) formed under the *Memorandum of Understanding (MOU) for the protection of remnant vegetation on private land in the agricultural region of Western Australia*, (Agriculture WA, 1997) in March 2003. The IDC comprises representatives from the Department of Environment and Department for Conservation and Land Management.

Following consideration by the IDC, the proposal was referred to the EPA by the Office of the Commissioner of Soil and Land Conservation in January 2004 in view of potential biodiversity conservation impacts.

As the proposal appeared unlikely to meet the EPA's environmental objectives, the level of assessment was set at Proposal Unlikely to be Environmentally Acceptable (PUEA). At that time, a statement of the reasons for the PUEA level of assessment was made publicly available, as set out in EPA's Administrative Procedures for Environmental Impact Assessment 2002.

Section 44 of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on the environmental factors relevant to the proposal and on the conditions and procedures to which the proposal should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

Accordingly, Section 3 discusses environmental factor relevant to the proposal and Section 4 presents the EPA's conclusions and recommendations. References are listed in Appendix 1.

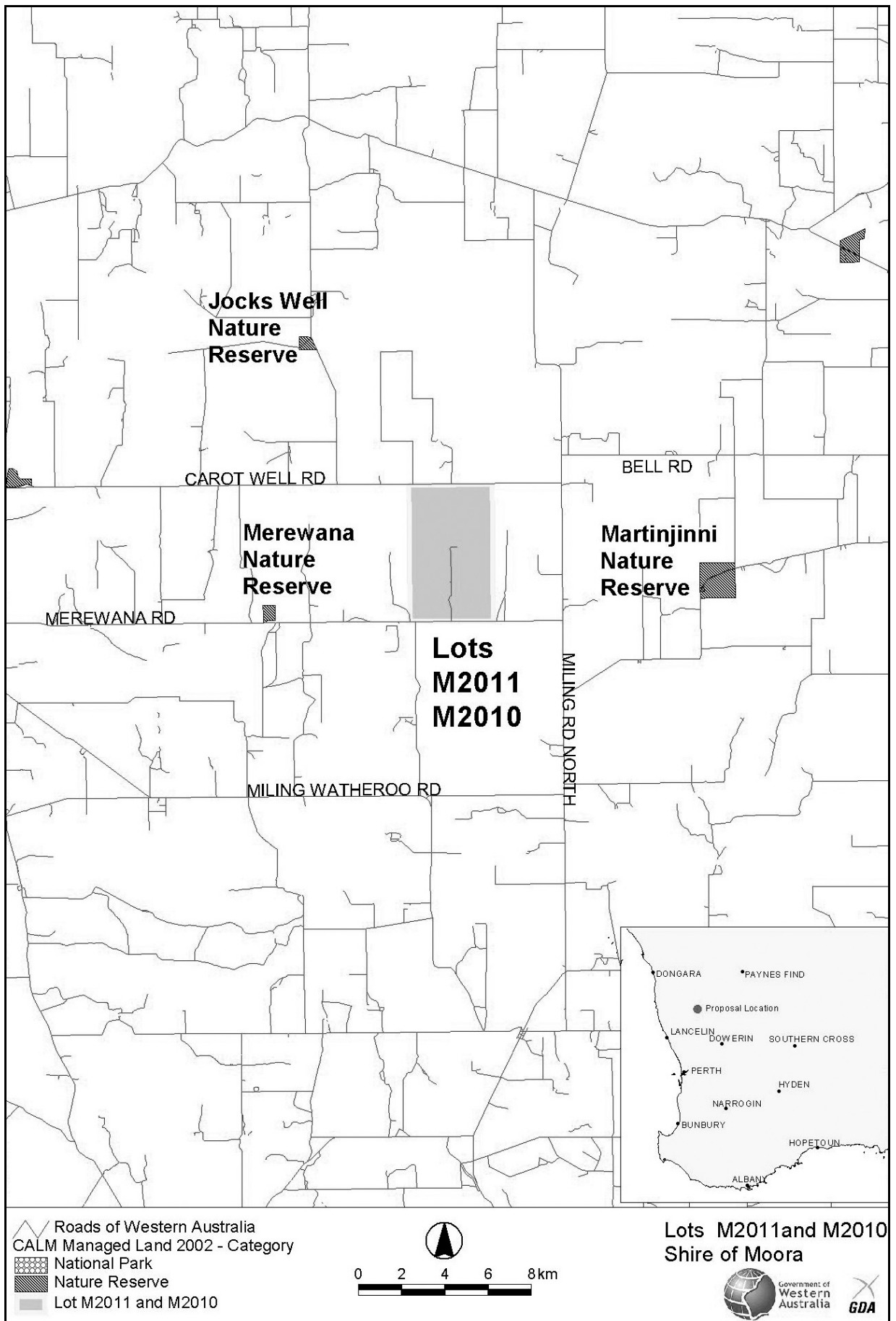


Figure 1: Location of proposal

2. The proposal

The proponent and landowner Mr Q R Bricknell, proposes to clear approximately 77 ha of native vegetation on his farming property to provide land for pasture and cropping. The property, Melbourne Location 926, has a total area of approximately 2427 ha and is located approximately 27 km east of Watheroo (see Figure 1).

Table 1: Summary of key proposal characteristics

Element	Description
Total area of property	2 427 ha
Approximate area of property cleared	2035 ha (83.85%)
Approximate area of vegetation to remain if proposal implemented (of total property area)	315 ha (13%)
Area of native vegetation to be protected under an Agreement To Reserve	N/A
Purpose of proposed clearing	Agriculture – cropping and pasture
Mapped description of the type/s of vegetation proposed to be cleared, according to GIS mapping of NLWRA vegetation types	Shrublands; scrub heath on yellow sandplain Banksia-Xylomelum alliance (Unit No. 694)
Total mapped extent of NLWRA vegetation type supporting woody vegetation (of any condition) Shepherd et al. (2002)	68 872 ha (17.1%)
Of the original extent remaining, the total representation in (IUCN Category I to IV) secure conservation reserves of vegetation type/s proposed to be cleared, according to Shepherd et al. (2002)	35 813 ha (52.8%)
Condition of vegetation (Keighery, 1994)	Very Good – some degraded areas within the bush that is affected by waterlogging and salinity with samphire as main plant type.
Declared Rare Flora/Priority Flora	5 DRF in same vegetation type in local area (10km) nearest population less than 1km south of property

Abbreviations NLWRA National Land and Water Resource Audit
IUCN International Union for the Conservation of Nature

The extent of the proposed clearing is provided as Figure 2.

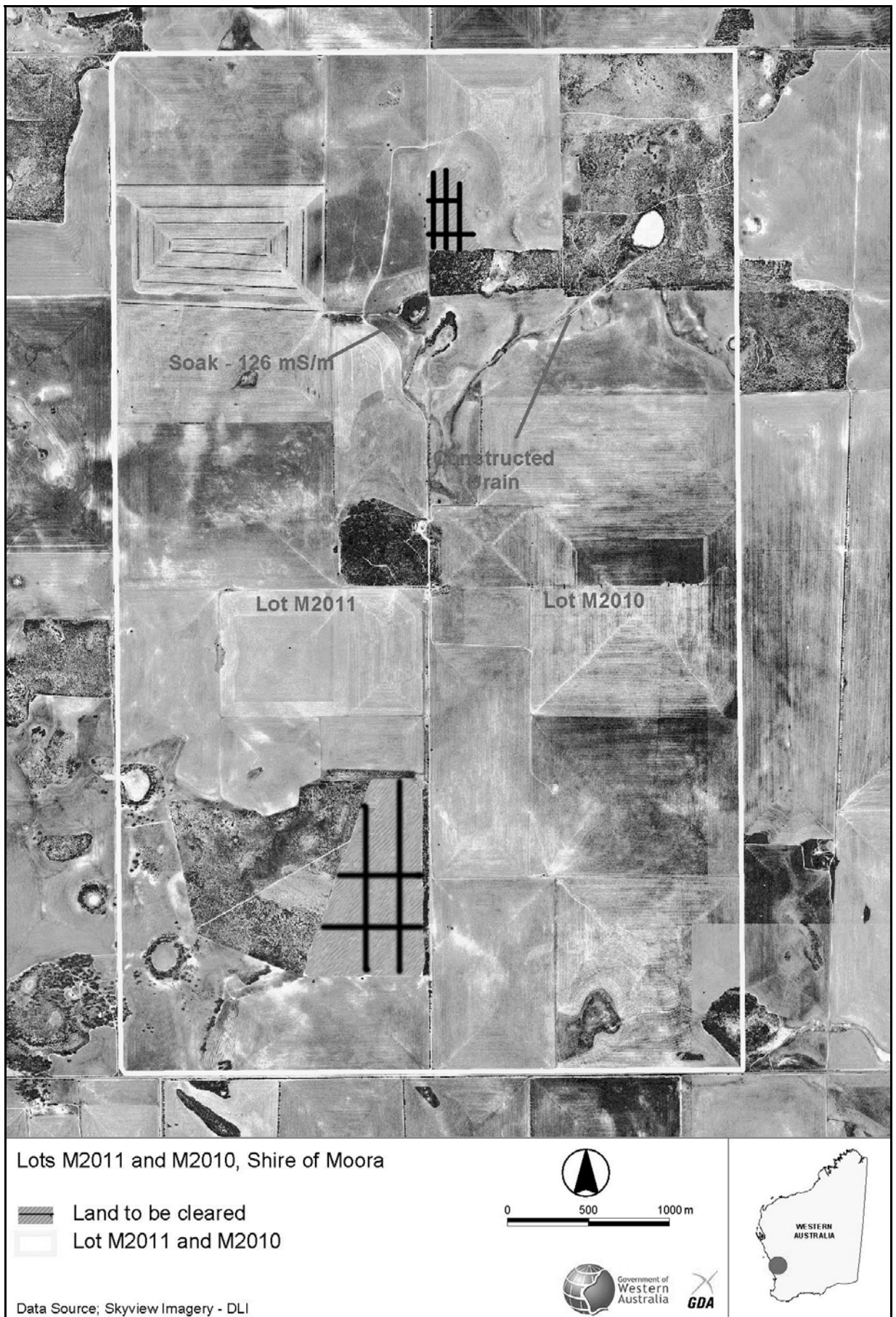


Figure 2: Proposed clearing

3. Relevant environmental factors

It is the EPA's opinion that 'biodiversity' is the environmental factor relevant to the proposal, which requires detailed evaluation in this report.

3.1 Biodiversity

Objective

The EPA's objective for biodiversity conservation is to avoid adverse impacts on biological diversity, comprising the different plants and animals and the ecosystems they form, at the levels of genetic diversity, species diversity and ecosystem diversity.

Description

Bioregional context

Melbourne Location 926 is located within the 2 460 225 ha Geraldton Sandplains Interim Biogeographical Region of Thackway & Cresswell (1995). Approximately 663 290 ha or 27% of the area of the Bioregion within the Intensive Land-use Zone is estimated to support native vegetation (Shepherd et al, 2002).

The Geraldton Sandplains Bioregion is recognised as containing significant areas of very high biological diversity in the context of South-western Australia. The ecological significance of the area is related to the number of regionally endemic plant species, the high level of species richness of vascular plants and the diverse vegetation associations and communities (George et al, 1979).

Regional and local context

No site-specific surveys have been carried out for the vegetation of Melbourne Location 926. However, based on regional mapping of vegetation by government agencies for the National Land and Water Resources Audit (Shepherd et al 2002), the vegetation proposed to be cleared is identified as Shrublands: scrub heath on yellow sandplain *Banksia-Xylomelum* alliance (Unit No. 694).

Analysis of the estimated pre-clearing extent of this unit against that which currently remains from Shepherd et al (2002), is presented in Table 1.

Although no site specific survey has been undertaken, the assessment undertaken by the Land Conservation Officer in relation to the IDC describes the majority of the vegetation subject to the NOIC as being in very good condition. Some degraded areas are noted within the bush that are believed to be affected by waterlogging and salinity as evidenced by the presence of samphires interspersed with bare soil.

Melbourne Location 926 is predominantly cleared of remnant native vegetation. The remaining vegetation has the potential to provide a valuable linkage role with three small nature reserves within a 10 km radius of the subject land (see Figure 1) within a predominantly cleared landscape.

Significant flora

The EPA notes that no specific surveys have been carried out which would identify the presence of significant flora within the area of native vegetation proposed to be cleared. However, the Department of Conservation and Land Management's (CALM) Rare Flora Database indicates that there are 5 known threatened flora populations of 3 different species within the same vegetation type subject to the NOIC within the local area (10 km radius). The nearest population is located less than 1 km away from the southern boundary of Lot 2011.

Assessment

Policy framework

It is now well recognised that broad-scale land clearing has had a dramatic adverse effect on biodiversity in the agricultural area through the direct loss of vegetation communities and plant species. Associated with this is the loss of mammals, birds, and other animals which depend upon large enough areas of healthy vegetation for food and habitat. These impacts have been reported in both the State and Commonwealth *State of the Environment* reporting (Government of Western Australia, 1998; Commonwealth of Australia, 1996).

In recognition of these impacts on biological diversity and nature conservation, as well as land and water degradation, the State and Commonwealth Governments have over recent years developed and implemented various policy positions and programs to provide a strategic context for the protection of remnant vegetation.

A recent development in Government Policy on protection of native vegetation is the publication of the *National Objectives and Targets for Biodiversity Conservation Stemming from the National Strategy for the Conservation of Australia's biodiversity 2001 - 2005* (Commonwealth of Australia, 2001). In this document, the Commonwealth Government and the majority of the States, including Western Australia, have agreed to pursue the target of ensuring that all jurisdictions have clearing controls in place that will have the effect of reducing the net national rate of land clearance to zero.

EPA Position Statement No. 2

A number of land clearing proposals have been referred to the EPA over recent years for consideration of the potential environmental impacts. From a review of the information provided during these assessments, the strategic framework provided by government policy positions and programs, and general scientific information which has become available on the potential cumulative impacts of broad-scale clearing on the environment, the EPA has developed Position Statement No. 2 *Environmental Protection of Native Vegetation in Western Australia – Clearing of native vegetation with particular reference to the agricultural area* (EPA, 2000). In considering proposals that have the potential to affect the values described above, the EPA is primarily guided by EPA Position Statement No.2.

This proposal involves clearing for agricultural purposes within the agricultural area of Western Australia, as defined by the map presented as Figure 1 of the EPA's Position Statement No.2. The EPA's position with respect to clearing of native vegetation for agricultural purposes within this area is that any further reduction in native vegetation through clearing for agriculture cannot be supported.

In this Position Statement, the EPA also identifies a 'threshold level' of 30% of the original extent of the vegetation type below which species loss appears to accelerate exponentially. A level of 10% of the original extent of the vegetation type remaining is considered to represent an 'endangered' state.

In addition Section 4.3 (Page 9), of the Position Statement identifies that in considering proposals to clear native vegetation, the EPA will focus on the principles and the related objectives and actions of the National Strategy for the Conservation of Australia's Biological Diversity (Commonwealth, 1996). One of the basic elements that the EPA will consider in its assessment of proposals that have the potential to impact biological diversity includes the following:

there is comprehensive, adequate and secure representation of scarce or endangered habitats within the project area and/or in areas which are biologically comparable to the project area, protected in secure reserves (Govt. of WA, 2000)

Site specific vegetation and biodiversity significance

As noted above, no site specific surveys have been undertaken for Melbourne Location 926, however the vegetation proposed to be cleared is identified as Shrublands: scrub heath on yellow sandplain Banksia-Xylomelum alliance.

From the information presented in Table 1, any further clearing of Unit 694 Shrublands: scrub heath on yellow sandplains Banksia-Xylomelum alliance vegetation association may have irreversible consequences for the conservation of biodiversity, as the remaining extent of this vegetation type is already significantly below the 30% threshold identified by the EPA in Position Statement No.2. Approximately half this remaining vegetation is represented in secure conservation reserves.

As noted previously, information provided by the IDC on this proposal included information from CALM's Rare Flora Database where records indicate that there are 5 known threatened flora populations within the same vegetation complex proposed to be cleared in the local area (10 km radius). The site is also considered likely to have an ecological linkage value between 3 nearby nature reserves.

In summary, the proposal involves clearing of native vegetation within the agricultural area that would significantly impact the conservation of biodiversity in a local and regional context. Accordingly, it is the EPA's opinion that the proposal cannot be managed to meet the EPA's environmental objectives.

4. Conclusions and Recommendations

The vegetation proposed for clearing is located within the agricultural area identified in EPA's Position Statement No. 2 and appears likely to contain plant species and communities that are depleted, poorly conserved and inadequately represented in secure conservation reserves, such that any further clearing may have irreversible consequences for the conservation of biodiversity. The proposal would also impact significantly on the conservation of biodiversity in the local and regional context.

The EPA has therefore concluded that the proposal to clear approximately 77 ha of remnant native vegetation by Mr Q R Bricknell is environmentally unacceptable as it cannot be managed to meet the EPA's objectives.

The EPA submits the following recommendations to the Minister for the Environment:

1. that the Minister notes that the proposal being assessed is for the proposed clearing of approximately 77 ha of remnant native vegetation for agricultural purposes;
2. that the Minister considers the report on the relevant environmental factors as set out in Section 3 of this report;
3. that the Minister notes that the EPA has concluded that the proposal cannot be managed to meet the EPA's objective in relation to biodiversity conservation; and
4. that the Minister notes that the EPA has not included in this Bulletin "conditions and procedures to which the proposal should be subject, if implemented" because the EPA holds the view that the proposal should not be implemented.

Appendix 1

References

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