Clearing of approximately 1128 hectares of native vegetation for agriculture Victoria Location 10877 corner of Garibaldi-Willis and Willmott Roads, Coorow

Mr B Sorgiovanni

Report and recommendations of the Environmental Protection Authority

Environmental Protection Authority
Perth, Western Australia
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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 B Sorgiovanni to clear approximately 1128 hectares (ha) of native vegetation for agriculture on Victoria Location 10877 corner of Garibaldi-Willis and Willmott Roads, approximately 47 kilometres west of Coorow.

Following consideration by the Inter Departmental Committee (IDC) 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 Commissioner of Soil and Land Conservation for consideration of possible environmental impacts on 12 June 2003.

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 July 2003. At that time a brief 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 detailed 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 1128 ha of native vegetation on Victoria Location 10877 corner of Garibaldi-Willis and Willmott Roads, 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 and:

- 1. That the Minister notes that the proposal being assessed is for the clearing of approximately 1128 ha of native vegetation agricultural purposes on Victoria Location 10877 corner of Garibaldi-Willis and Willmott Roads, approximately 47 kilometres west of Coorow.
- 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, based on available information, that the proposal as put forward by the proponent cannot be demonstrated to meet the EPA's objective in relation to 'biodiversity'.
- 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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Appendice1. 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 B Sorgiovanni to clear approximately 1128 ha of native vegetation for agricultural purposes on Victoria Location 10877. The property is located near the corner of Garibaldi-Willis and Willmott Roads, approximately 47 kilometres west of Coorow. 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 proposal to clear native vegetation affecting approximately 1128 ha of intact native vegetation at the above location was considered by the 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) following the submission, by the proponent, of a Notice of Intent to Clear (NOIC) under the provisions of the SLC Act.

Following consideration by the IDC, the proposal was referred to the EPA by the Office of the Commissioner of Soil and Land Conservation in May 2003 in view of potential biodiversity conservation impacts. The Commissioner did not object to the proposed clearing under the provisions of the SLC Act.

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 brief 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.

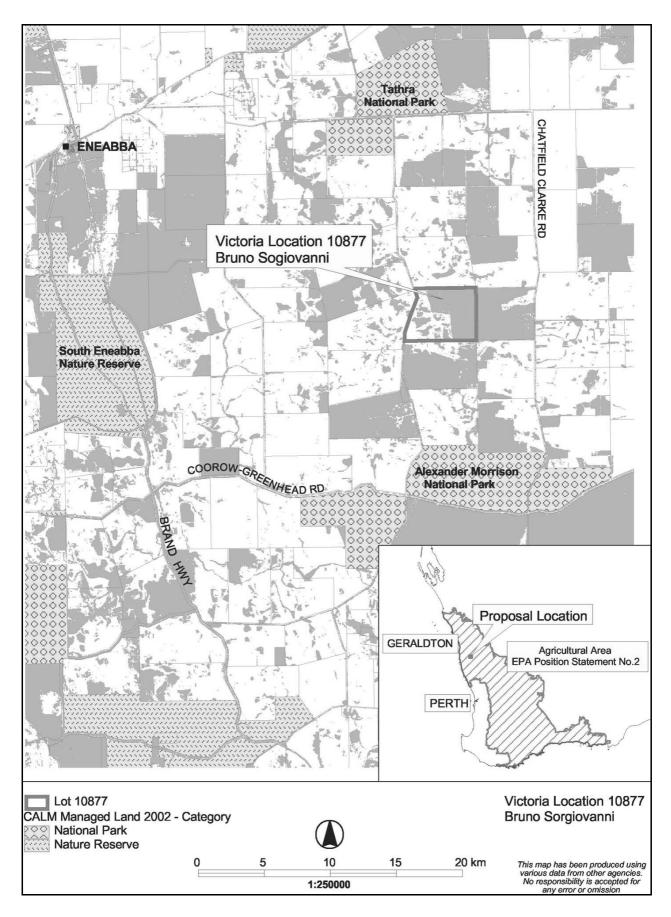


Figure 1: Location of Proposal

2. The proposal

The proponent and landowner Mr B Sorgiovanni, proposes to clear approximately 1128 ha of native vegetation on his farming property to provide land for cropping and grazing. The property, Victoria Location 10877, has a total area of approximately 1971 ha and is located approximately 47 kilometres west of Coorow (see Figure 1).

Table 1: Summary of key proposal characteristics

Element	Description
Total area of property	1971.0316 ha
Approximate area of property uncleared	1494 ha (75.8%)
Approximate area to be cleared	1128 ha (57% of property area)
Approximate area of vegetation to remain if proposal implemented	366 ha (18.6%)
Area of native vegetation to be protected under an Agreement To Reserve (ATR)	0 ha
Purpose of proposed clearing	Agriculture – cropping and grazing
Condition of vegetation	Majority in very good to excellent condition
Mapped description of the type/s of vegetation proposed to be cleared, according to GIS mapping of NLWRA vegetation types	Shrublands: scrub heath on lateritic sandplains (Unit 379) (approximately 80% of clearing area) and Shrublands: mixed heath (approximately 20% of clearing area) (Unit 49)
Total mapped extent of NLWRA vegetation type supporting woody vegetation (of any condition) Shepherd <i>et al</i> (2002)	379 - 128 007 hectares or 20.2% of original extent 49 - 23 904 hectares or 40.4% of original extent
Total representation in (IUCN Category I to IV) secure conservation reserves of vegetation type/s proposed to be cleared, according to Shepherd <i>et al.</i> (2002)	379 – 5 248 hectares or 18.4% in reserves 49 – 10 876 hectares or 4.1% in reserves

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.

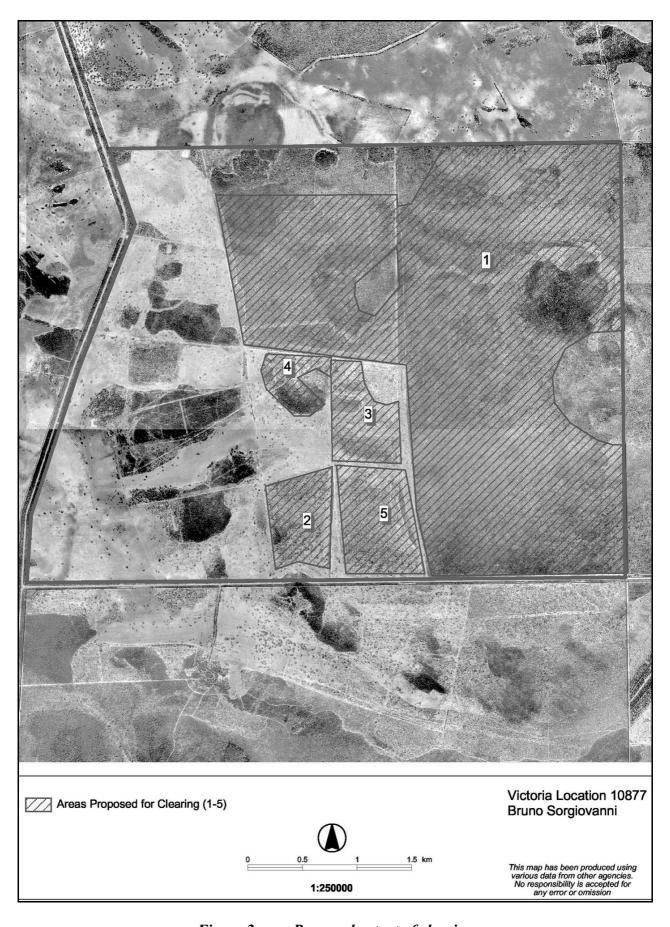


Figure 2: Proposed extent of clearing

Relevant environmental factor

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

2.1 Biodiversity

Objective

The EPA's objective with respect to 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

Victoria Location 10877 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 Victoria Loc. 10877. 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 lateritic sandplains* with some areas of *Shrublands: mixed heath*.

Analysis of the estimated pre-clearing extent of each 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 to excellent condition. An area in the southern portion of Area 3 has been previously cleared but is described as being in good condition.

The native vegetation on Victoria Location 10877 comprises a large (1494 hectare) semicontiguous native vegetation remnant in a predominantly cleared local landscape and is therefore likely to have a significant role in providing an ecological linkage between nearby areas of native vegetation including Alexander Morrison and Tathra National Parks (See Figure 1).

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 (DCLM)'s Rare Flora Database indicates that there are 38 known threatened flora populations of 16 different species within the same vegetation complex subject to the NOIC within the local area (15 km radius).

Assessment

Policy framework

It is now well recognised that broad-scale land clearing and consequential salinity have 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 Victoria Location 10877, however the vegetation proposed to be cleared is identified as *Shrublands: scrub heath on lateritic sandplains* with some areas of *Shrublands: mixed heath*.

From the information presented in Table 1, any further clearing of Unit 379 *Shrublands: scrub heath on lateritic sandplains* vegetation association may have irreversible consequences for the conservation of biodiversity, as the remaining extent of this vegetation type is already below the 30% threshold identified by the EPA in Position Statement No.2. In addition, the estimated amount remaining in secure conservation reserves of this vegetation type, is approximately 18.4%.

Available data indicates that approximately 40% of the original area of Unit 49 *Shrublands: mixed heath* now supports native vegetation (Sheppard et al, 2002). Geographic Information System analysis indicates that very little of this vegetation type (approximately 4%) remains in secure nature conservation reserves.

As noted previously, information provided by the IDC on this proposal included information from DCLM's Rare Flora Database where records indicate that there are a large number (38) of known threatened flora populations within the same vegetation complex proposed to be cleared in the local area (15 km radius). The site is also considered to have a significant ecological linkage value between nearby areas of native vegetation including Alexander Morrison and Tathra National Parks.

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.

3. 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.

Therefore, the EPA has concluded that the proposal to clear 1128 ha by Mr B Sorgiovanni 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 clearing of approximately 1128 ha of native 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 the protection of biodiversity; 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

References

- Agriculture Western Australia (1997) Memorandum of Understanding between the Commissioner for Soil and Land Conservation, Environmental Protection Authority, Department of Environmental Protection, Agriculture Western Australia, Department of Conservation and Land Management and the Water and Rivers Commission for the protection of remnant vegetation on private land in the agricultural region of Western Australia. Agriculture Western Australia: Perth, WA.
- Commonwealth of Australia (1996) *Australia: State of the Environment 1996*. Department of Environment Sport and the Territories. CSIRO Publishing.
- Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation (2001-2005)*. Environment Australia, Canberra.
- 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. Environmental Protection Authority, Government of Western Australia.
- George. A.S., Hopkins, A.J.M., and Marchant N.G. (1979) *The Heathlands of Western Australia*. In R.L. Specht (ed) *Ecosystems of the World 9A Heathlands and related Shrublands. Descriptive Studies*. pp 211-230. Elsevier Amsterdam.
- Government of Western Australia (1998) Environment Western Australia 1998 State of Environment Report. Western Australian Government, Perth, Western Australia.
- Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2002) *Native Vegetation in Western Australia. Technical Report 249*. Department of Agriculture, Western Australia, South Perth.
- Thackway, R and Cresswell I.D. (Eds.) (1995). An Interim Biogeographic Regionalisation for Australia: A Framework for Establishing the National System of Reserves Volume 4. Australian Nature Conservation Agency, Canberra.