

**Clearing of approximately 1000 hectares of
native vegetation Kent Location 1664, corner
Lake Magenta and Reserve Roads
Shire of Jerramungup**

Mr Brian Burns

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

**Environmental Protection Authority
Perth, Western Australia
Bulletin 1262
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Environmental Impact Assessment Process Timelines

Date	Progress stages	Time (weeks)
October 1999	Referral received	
December 2005	Letter and draft Statement of Reasons to proponent, indicating possible PUEA	6 years 2 months
February 2006	Level of Assessment set	3 months
April 2007	Appeals to Minister for the Environment	14 months
September 2007	EPA report to the Minister for the Environment	5 months

Report Released: 10.09.2007
Appeals Close: 24.09.2007

Assessment No. 1626

Summary and recommendations

This report provides the Environmental Protection Authority's (EPA) advice and recommendations to the Minister for the Environment on the proposal to clear approximately 1000 hectares (ha) of native vegetation on Kent Location 1664, corner Lake Magenta and Reserve Roads, Shire of Jerramungup by Mr Brian Burns.

Section 44 of the *Environmental Protection Act 1986* (EP Act) requires the EPA to report to the Minister for the Environment on the outcome of its assessment of a proposal. The report must set out:

- The key environmental factors identified in the course of the assessment; and
- The EPA's recommendations as to whether or not the proposal may be implemented, and, if the EPA recommends that implementation be allowed, the conditions and procedures to which implementation should be subject.

The EPA may include in the report any other advice and recommendations as it sees fit.

Key environmental factors

The EPA decided that the following key environmental factors relevant to the proposal required detailed evaluation in the report:

- (a) biodiversity conservation; and
- (b) potential land degradation.

Conclusion

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 '*Environmental Protection of Native Vegetation in Western Australia – Clearing of Native Vegetation, with Particular Reference to the Agricultural Area*'. Consistent with the EPA's position as outlined in Position Statement No. 2, from an environmental perspective any further reduction in native vegetation through clearing for agricultural purposes, cannot be supported (EPA, 2000).

The bioregion has been extensively cleared and is subject to numerous threats that are contributing to the overall decline in health and biodiversity values of the region.

In summary:

- The proposal is inconsistent with the EPA's Position Statement No. 2 *Environmental Protection of Native Vegetation in Western Australia* where, from an environmental perspective, any further reduction in native vegetation through clearing for agricultural purposes cannot be supported.
- The former Department of Conservation and Land Management (CALM) has also identified a halt to clearing in this bioregion as part of its Bioregional audit of 2002.
- The Mallee bioregion has been significantly cleared with only 19.5% vegetation remaining in the Intensive Land Use Zone.

- Only 17% vegetation cover remains in the western and central parts of the Western Mallee (MAL2) bioregion.
- 35% of the original extent of this vegetation type remains with only half of this represented in secure conservation reserves.
- The proposed clearing is likely to result in land degradation in the form of salinity that may have offsite impacts on Lake Magenta.

There are two separate but related aspects to this proposal to clear land at the Shire of Jerramungup. The first is environmental and clearly within the remit of the EPA to advise. On the basis of environmental values and environmental specifics the EPA has recommended that the land not be cleared, and that the proposal not be implemented. This is a firm recommendation of the Authority.

The second aspect is beyond the brief of the EPA, and within the realm of Government. It relates to the consequence of the environmental decision on the particular proponent. The Authority makes no recommendation on this matter, except to highlight to Government the consideration of this consequence.

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 proposed clearing of approximately 1000 ha of native vegetation Kent Location 1664, corner Lake Magenta and Reserve Roads;
2. That the Minister considers the report on the key 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
 - potential land degradation.
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 key environmental factors for the proposal by Mr Brian Burns, to clear approximately 1000 hectares (ha) of native vegetation on Kent Location 1664, corner Lake Magenta and Reserve Roads.

Below is a history and background to this and another proposal by Mr Burns to clear approximately 779ha on Roe Locations 2598 & 2599, Shire of Lake Grace.

Further details of the proposal are presented in Section 2 of this Report.

A Notice of Intent to Clear (NOIC) approximately 1000ha of native vegetation on Kent Location 1664 was received from the registered proprietor Mr Burns, at the Office of the Commissioner of Soil and Land Conservation on 19 November 1998.

Mr Burns had previously notified to clear 450ha on Kent Location 1664 in 1996, to which the Commissioner objected and a Soil Conservation Notice (SCN) was issued to protect the native vegetation in the notified area.

On 15 February 1999, the Deputy Commissioner of Soil and Land Conservation objected to the proposed clearing of 1000ha as land degradation in the form of salinity was likely to result, with potential wind erosion identified as a secondary concern. A SCN was issued on 28 April 1999 directing Mr Burns to refrain from clearing approximately 1429ha, approximately 99% of the property.

Mr Burns appealed against the SCN and a committee was established to review the proposal as to whether or not the Commissioner erred in his decision to apply a SCN to the property. This Committee was required to consider the appeal against this SCN as well as the SCN on another of Mr Burns' properties, Roe Locations 2598 & 2599.

In accordance with the procedures outlined in Schedule 5 of the *Memorandum of Understanding (MOU) for the protection of remnant vegetation on private land in the agricultural region of Western Australia*, (Agriculture WA, 1997) the proposal was considered by the Inter Agency Working Group (IAWG) on 14 July 1999.

Following consideration by the IAWG the proposal was referred to the EPA by the Office of the Commissioner of Soil and Land Conservation in October 1999, in view of potential biodiversity conservation impacts, including potential impacts on the adjacent Lake Magenta Nature Reserve and Vacant Crown Land.

Mr Burns was informed in October 1999 that his proposal had been referred to the EPA by the Deputy Commissioner in view of the potential impacts likely to result from the proposed clearing. Mr Burns was advised that as his appeals against the Commissioner's decision to place a SCN on his property had not been determined, it was premature for the EPA to proceed to making a decision as to whether or not to assess the proposal. In particular, if the Minister for Primary Industry was to dismiss the appeal against the SCN and uphold the Commissioner's decision then the EPA would not have a proposal on which to make a decision.

The EPA was informed on 14 March 2000 that after receiving advice from the Appeals Committee appointed to review the Commissioner's decision with regard to the SCN on Kent Location 1664, the Minister for Primary Industry decided that the SCN should remain in place and that no further clearing take place. Accordingly, at that time the EPA was of the view that it no longer had a proposal likely to be implemented that required the EPA to make a decision whether or not to assess the proposal in accordance with section 39A of the *Environmental Protection Act 1986* (EP Act).

In view of an appeal the proponent lodged against the SCN, the EPA decided in December 2005 that there was the potential for the proposal to be implemented and as such it was appropriate to advise of its decision to assess the proposal to clear 1000ha of remnant vegetation on Kent Location 1664.

In February 2006 the EPA advertised its decision to assess the proposal as Proposal Unlikely to be Environmentally Acceptable (PUEA) in accordance with Part IV Division 1 of the EP Act due to potential unacceptable biodiversity and land degradation impacts.

Appeals on the PUEA level of assessment were dismissed by the Minister for the Environment on 28 April 2007.

Section 44 of the EP Act requires the EPA to report to the Minister for the Environment on the key environmental factors for 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 key environmental factors for the proposal and Section 4 presents the EPA's conclusions and recommendations. References are listed in Appendix 1.

2. The proposal

The proponent, Mr Burns, proposes to clear approximately 1000ha of native vegetation at Kent Location 1664, corner Lake Magenta and Reserve Roads in the Shire of Jerramungup (Figure 1).

The subject property is located approximately 50 kilometres (km) north east of Jerramungup and about 60km from the south coast. The property lies approximately 5km east of the Lake Magenta Nature Reserve and approximately 20km north of the Fitzgerald River National Park (Figure 2).

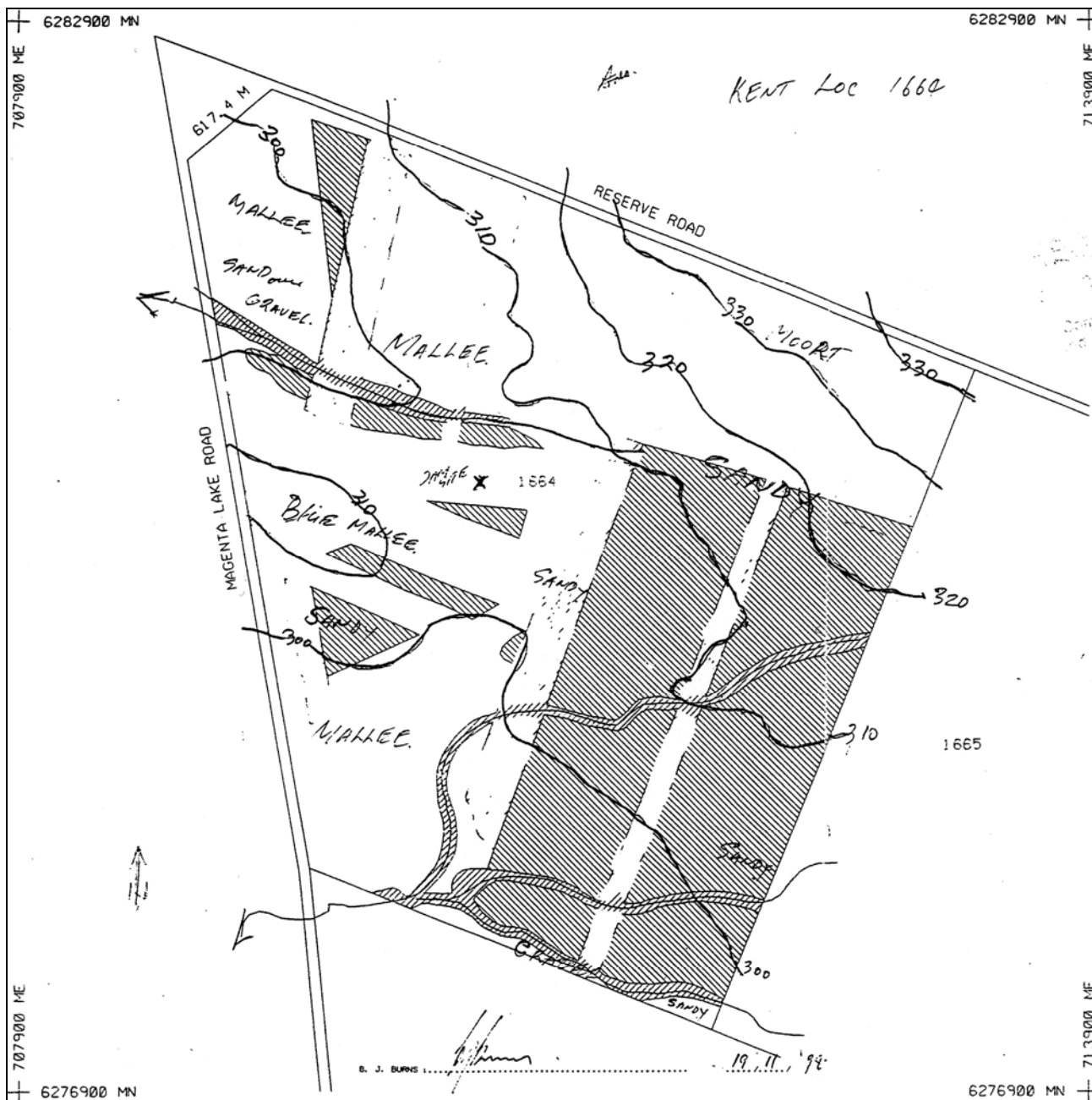


Figure 1: Proposed clearing (Proposal as received by the EPA attached to NOIC Schedule 2 Form 1 Registered by Commissioner of Soil and Land Conservation November 1998)

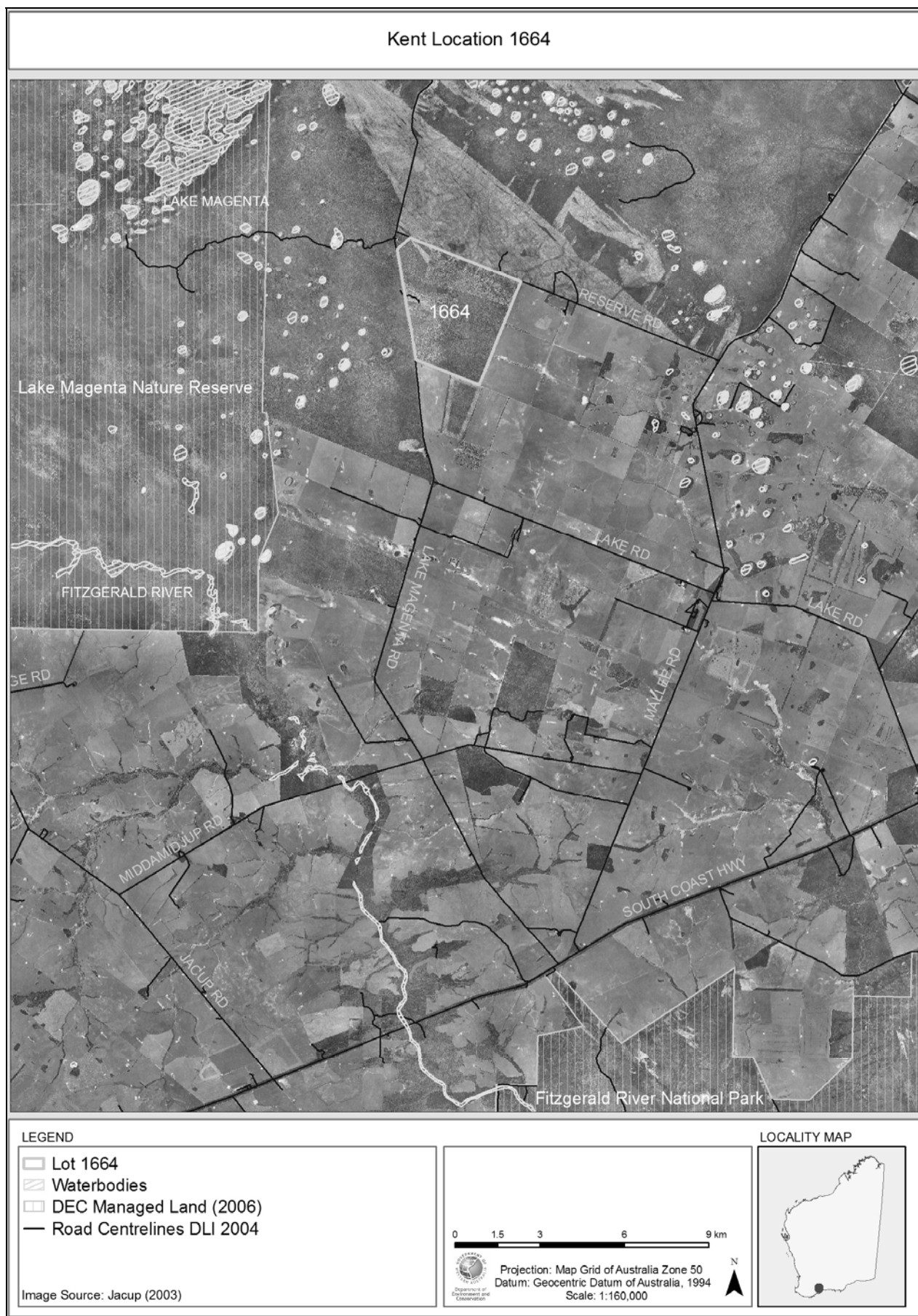


Figure 2: Proposal Location

3. Key environmental factors

The EPA considers that this proposal to clear 1000ha of native remnant vegetation for the purpose of cropping and grazing cannot be made environmentally acceptable. The bioregion has been extensively cleared and is subject to numerous threats that are contributing to the overall decline in the health and biodiversity values of the region.

Furthermore, the proposed clearing is likely to cause offsite land degradation in the form of salinity that may have offsite impacts on Lake Magenta.

It is the EPA's opinion that the following key environmental factors for the proposal require detailed evaluation in this report:

- (a) biodiversity conservation; and
- (b) potential land degradation.

The key environmental factors are discussed in Sections 3.1 to 3.2 of this report. A summary of the EPA's assessment is presented in Table 1.

Table 1: Summary of assessment of key environmental factors

Key Environmental Factor	EPA Objective	Proposal Characteristic	EPA Assessment	EPA Advice
BIOPHYSICAL				
Biodiversity conservation	To maintain the abundance, diversity, geographic distribution and productivity of flora at species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge.	Proposed clearing of 1000ha of native remnant vegetation. The proposal is within the extensively cleared Mallee bioregion. The vegetation type itself has been significantly cleared with only 35% of the original extent remaining and only half of this represented in secure conservation reserves.	The proposal is considered likely, if implemented to have a significant impact on biodiversity conservation. The bioregion has been extensively cleared and is subject to numerous threats that are contributing to the overall decline in health and biodiversity values of the region.	Proposal cannot be managed to meet the EPA's objective.

Key Environmental Factor	EPA Objective	Proposal Characteristic	EPA Assessment	EPA Advice
Land degradation	To maintain the integrity, ecological functions and environmental values of the soil and landform.	Proposed clearing of 1000ha of native remnant vegetation is considered likely to result in land degradation in the form of salinity.	The Land Conservation Officer report (1999) states that the property drains towards the salt lakes in the Lake Magenta Wildlife Sanctuary to the west of the property. Further hydrological assessments report the likely consequences of the proposed clearing include small areas of the National Park may become salt affected.	Proposal cannot be managed to meet the EPA's objective.

3.1 Biodiversity Conservation

Description

Region

The proposal area is located within the 7 404 398 ha Mallee Interim Biogeographical Region of Thackway & Cresswell (Shepherd et al. 2002). Approximately 806 971 ha or 19.5% of the bioregion within the Intensive Land-use Zone (ILZ), is estimated to support native vegetation (Shepherd et al. 2002), which is below the 30% threshold identified by the EPA in Position Statement No. 2 *Environmental Protection of Native Vegetation in Western Australia, with particular reference to the agricultural area*.

The Mallee bioregion is recognised as containing significant biodiversity values. Rare features include granite outcrops, Gypsum dunes, rare vertebrates, freshwater wetlands and salt lake systems (CALM, 2002).

More than 35% of the Mallee bioregion's original mammal fauna is regionally extinct. Under State legislation 11 plant species have been declared as critically endangered, 21 plants, two mammals and one bird as endangered and 15 plants, three mammals and four birds are listed as vulnerable. For the endangered Carnaby's Cockatoo and the Vulnerable Mallee fowl, the bioregion is thought to support a major portion of the population [(Australian Nation Resource Atlas) ANRA].

The Mallee bioregion is subject to significant stress from salinity, vegetation fragmentation, weeds, fire, feral herbivores and predators. The ANRA: Biodiversity and Vegetation Assessment for the Mallee bioregion, summarises the overall condition of the bioregion as *Fair to Poor*, with the trend declining. The situation is

considered to resemble that of the Avon Wheatbelt with a landscape stress class of 2, where 1 is the most stressed (CALM, 2002).

At a sub-regional level, the subject lots are located within the western and central parts of the Western Mallee (MAL2), bioregion where only 17.3% native vegetation cover remains (CALM b, 2002). The reserve system in the MAL2 is also considered biased and fragmented. Eighteen ecosystems are not reserved and have a high priority for acquisition with Lowland communities such as *mallee shrublands* considered under threat from rising water tables and expected to be lost in future if current trends continue.

In the Biodiversity Audit produced by the (former) Department of Conservation and Land Management (CALM) in 2002, a list of conservation priorities for the bioregion were identified that include a halt to all clearing in recognition of the extensive historic clearing, lack of reserves, significant threats and a declining trend in overall condition.

All remnants are now therefore considered important for biodiversity conservation and building towards a Comprehensive, Adequate and Representative reserve system.

Catchment

Kent Location 1664 is located on the poorly defined catchment divide between the ancient drainage line that feeds Lake Magenta (part of the Lockhardt catchment) and the internally drained Mallee Road Sump.

Lake Magenta is recognised as a wetland of State and subregional significance. It supports a significant number of plant and animal taxa including migratory species and contains the rare “lawn” community in excellent condition (CALM, 2002).

In 2002, the government announced that CALM had begun a recovery project to address salinity degradation at the headwaters of the Fitzgerald River Biosphere reserve, including Lake Magenta and surrounding farmland.

Local

The vegetation type as identified by the Land Conservation Officer for the 1998 Level 2 assessment of the NOIC is described as *Eucalyptus tetragona mallee heath*. Beard 47 *Shrublands; tallerack mallee-heath*. This is consistent with Department of Environment and Conservation Geographical Information Systems mapping.

The report from the Appeals Committee established to review the decision by the Commissioner with respect to the SCN indicates that the natural vegetation cleared in the 1970's has regrown vigorously (with the exception of an area amounting to approximately 2ha), and is considered to be in *Good* condition.

Information collected for the National Land and Water Resources Audit (DEH, 2002) indicates that only 35% of the original extent of this vegetation remains type, with only half this protected in secure conservation reserves (Shepherd et al, 2002). This amounts to only 19% of the original extent of this vegetation type currently protected.

Assessment

The EPA's environmental objective for this factor is to maintain the abundance, diversity, geographic distribution and productivity of flora at species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge.

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 '*Environmental Protection of Native Vegetation in Western Australia – Clearing of Native Vegetation, with Particular Reference to the Agricultural Area*'. 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. Furthermore, the EPA has identified a threshold level of 30%, below which species loss appears to accelerate exponentially, a level of 10% is regarded as representing "endangered" (EPA, 2000).

The proposal will result in the clearing of 1000ha of native vegetation in *Good* condition in an area that has been identified as having the following characteristics:

- bioregion has been significantly cleared with only 19.5% vegetation remaining in the ILZ;
- only 17% vegetation cover remains in MAL2;
- the vegetation type has been significantly cleared with only 35% of the original extent remaining and only half of this represented in secure conservation reserves;
- overall condition of ecosystems in the bioregion is *Fair* to *Poor* and declining;
- comparable to the Avon Wheatbelt in terms of stress;
- subject to significant threats of salinity, vegetation fragmentation, weeds, fire, feral herbivores and predators; and
- the bioregion is a conservation priority and CALM has identified a halt to all clearing in recognition of the extensive historic clearing, lack of reserves, significant threats and a declining trend in overall condition.

Accordingly, it is the EPA's opinion that the proposal cannot be managed to meet the EPA's environmental objectives.

3.2 Land degradation

Description

As described above, Kent Location 1664 is located on the poorly defined catchment divide between the ancient drainage line that feeds Lake Magenta (part of the Lockhardt catchment) and the internally drained Mallee Road Sump.

Lake Magenta is recognised as a wetland of State and subregional significance. It supports a significant number of plant and animal taxa including migratory species and contains the rare "lawn" community in excellent condition (CALM, 2002).

In 2002, the government announced that CALM had begun a recovery project to address salinity degradation at the headwaters of the Fitzgerald River Biosphere reserve, including Lake Magenta and surrounding farmland.

Reports relating to rising water tables and high groundwater salinities by the Department for Agriculture and Water and Rivers Commission hydrologists provide strong evidence that the clearing of native vegetation in the area would lead to on and off site land degradation in the form of salinity (AC, 1999).

Assessment

The EPA's environmental objective for this factor is to maintain the integrity, ecological functions and environmental values of the soil and landform.

Investigations undertaken by the Department for Agriculture as part of the review of the Notice of Intent to Clear and subsequent review of the appeal against this, concluded that land degradation in the form of salinity was likely to result if the notified clearing was carried out

The report provided to the EPA included the following information and observations from the Level 2 field assessment:

- the salt content readings in the soil samples were very high indicating very high salt storage in the clay subsoil;
- the property drains towards the salt lakes in the Lake Magenta Wildlife Sanctuary to the west of the property;
- further hydrological assessments report the likely consequences of the proposed clearing include small areas of the National Park may become salt affected; and
- the government has initiated a plan to address the impacts of salinity at Lake Magenta and the Fitzgerald River National Park (AgWA, 1998).

Accordingly, it is the EPA's opinion that the proposal cannot be managed to meet the EPA's environmental objectives.

4. Conclusions and Recommendations

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 *'Environmental Protection of Native Vegetation in Western Australia – Clearing of Native Vegetation, with Particular Reference to the Agricultural Area'*. Consistent with the EPA's position as outlined in Position Statement No. 2, from an environmental perspective any further reduction in native vegetation through clearing for agricultural purposes, cannot be supported (EPA, 2000).

The bioregion has been extensively cleared and is subject to numerous threats that are contributing to the overall decline in health and biodiversity values of the region.

In summary:

- The proposal is inconsistent with the EPA's Position Statement No. 2 Environmental Protection of Native Vegetation in Western Australia where, from an environmental perspective, any further reduction in native vegetation through clearing for agricultural purposes cannot be supported.
- The former Department of Conservation and Land Management (CALM) has also identified a halt to clearing in this bioregion as part of its Bioregional audit of 2002.
- The Mallee bioregion has been significantly cleared with only 19.5% vegetation remaining in the Intensive Land Use Zone.
- Only 17% vegetation cover remains in the western and central parts of the Western Mallee (MAL2) bioregion.
- 35% of the original extent of this vegetation type remains with only half of this represented in secure conservation reserves.
- The proposed clearing is likely to result in land degradation in the form of salinity that may have offsite impacts on Lake Magenta.

There are two separate but related aspects to this proposal to clear land at the Shire of Jerramungup. The first is environmental and clearly within the remit of the EPA to advise. On the basis of environmental values and environmental specifics the EPA has recommended that the land not be cleared, and that the proposal not be implemented. This is a firm recommendation of the Authority.

The second aspect is beyond the brief of the EPA, and within the realm of Government. It relates to the consequence of the environmental decision on the particular proponent. The Authority makes no recommendation on this matter, except to highlight to Government the consideration of this consequence.

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 proposed clearing of approximately 1000 ha of native vegetation Kent Location 1664, corner Lake Magenta and Reserve Roads;
2. That the Minister considers the report on the key 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
 - potential land degradation.
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

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*. Perth, WA.

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