

**SUBMISSION TO NATIONAL RESOURCES COMMISSION BY  
LOWER MURRAY DARLING CMA  
ON  
RECOMMENDED AMENDMENTS TO CHAPTER 5 OF THE EOAM  
(BIOMETRIC AND THREATENED SPECIES TOOL) UNDER THE  
NATIVE VEGETATION REGULATION 2005**

**May 2009**

## **INTRODUCTION**

The Lower Murray Darling region covers approximately 6.3 million hectares in the southwest corner of NSW. Most of the region is uncleared with over 94% of the area being covered in native vegetation of varying condition. Grazing of native vegetation is the predominant land use in the region. The decline in the quality of native vegetation resulting from grazing by introduced herbivores, changed fire regimes, wildfire, introduced predators, and pest plants and animals have resulted in a significant loss of fauna species over the past 150 years.

The Biometric and Threatened Species Tools have not performed well in relation to the intact landscape described above, which has led to the loss of opportunities to improve environmental outcomes and also hindered significant opportunities to achieve biodiversity and conservation outcomes. As a result of these significant outcome related issues the LMD CMA has made a wide-ranging submission to the review of Chapter 5 of the Environmental Outcomes Assessment Methodology (EOAM), addressing many of the issues causing this.

The LMD CMA therefore has a very strong interest in the functioning of the EOAM and the recommended changes. The LMD CMA is concerned with the extremely short period available for comment on these changes, and concerned with the lack of consultation during the review period.

The EOAM review commenced in November 2007, and therefore has been in progress for about 18 months. Previous input from the LMD CMA on the recommended changes was limited to attendance at a meeting in Queanbeyan on 13th Dec 2007, a written submission on the 18th January 2008 (LMD CMA, 2008), and provision of data on vegetation condition in February 2008.

In the 15 months since February 2008, there has been no further consultation from the Biodiversity Review Group or DECC, and no advice or briefings on what recommendations were accepted, or what was rejected, or the reasons why particular decisions were made. No evidence has been presented to show that the recommended changes are based on sound scientific concepts, or the most recent information regarding the subject matter, or will encourage the adoption of a landscape approach to management of vegetation.

It is considered unrealistic within ten (10) working days to make a detailed submission on the 108 recommended changes (many of which are complex and involve changes to existing complex equations plus the inclusions of additional tables and calculations) with

no prior explanation or briefing as to why the changes have been recommended, or explanation as to what implications and impacts these will have. Without thorough testing of the changes (new and changed equations and tables) it is not possible to adequately gauge the impact the recommended amendments will have on future assessments.

Without more thorough testing, it is therefore difficult to tell whether or not proposed changes deliver their intended outcomes, which are to: ensure biodiversity assessment is meeting the intent and objectives of the NV Act, incorporate new science, and improve operational and functional aspects of the assessment tools.

**The LMD CMA therefore strongly suggests that the recommended changes should not be adopted until a full and rigorous testing of the effect of the EOAM changes has been made.**

## **AREAS OF CONCERN**

The following comments outline concerns with the EAOM amendments relevant to the LMD CMA catchment.

### **Biometric Tool**

#### **5.2.2 Determining whether the vegetation is in low condition.**

##### **Items 11-12**

The definition of '*low condition*' was considered of major importance to LMD CMA as the definition is considered inappropriate where grazing of native vegetation occurs. As LMD CMA stated in our original submission;

*"Native Vegetation that is grazed usually defaults as being in "good condition" due to heavy weighting on the overstorey component. This is not best science and needs to be reviewed. (Note: extinction of mammals in Western NSW is the highest in the world under current grazing landuse). Grazing impacts on mid and ground storey habitat/vegetation community condition and tree layer regeneration are largely ignored in the PVP assessment."*

The proposed changes have not addressed this issue. The LMD CMA therefore considers that 'sound scientific concepts' and the 'most recent information' are not being applied to the definition of 'low condition' when applied to the rangelands where grazing of native vegetation is being practised.

Further, the ongoing use of very low 'overstorey lower benchmarks', results in a number of vegetation communities defaulting as 'good condition'.

##### **Items 13 & 14**

The EOAM changes have reclassified chenopod shrublands as Woody Vegetation whenever the "tallest structural layer" is greater than one metre in height. This is

ambiguous, as it does not define if - only the plants that are over 1 metre high are considered overstorey, or - all plants of a species are considered overstorey if some individuals are over 1 metre.

The impact of the change in this definition needs to be further investigated to determine the following:

1. The current benchmarks as provided by DECC clearly defined each structural layer and provided a benchmark to gauge condition. The proposed benchmarks are not determined on this basis and may cause perverse results.
2. Will a species be split between storeys effecting both overstorey and groundcover measurements?

Another impact of this definition is that it can result in an area which has had the overstorey removed through logging or ringbarking being classified as 'good condition'. eg. A blackbox-lignum woodland may have had all the blackbox removed, resulting in the lignum being classified as overstorey, resulting in a 'good condition' assessment which could be considered a perverse result. This clause needs revision to state "*whenever the "tallest structural layer" is greater than one metre in height and the original overstorey has not been removed*"

There has been no evidence presented to show that this definition is based on sound scientific concepts or whether or not it will ensure biodiversity assessment is meeting the intent and objectives of the NV Act. It may result in operational and functional aspects of the assessment tools becoming more complex, particularly in areas where shrub species are present in multiple structural layers.

### **5.3.3 Assessing change in landscape value (items 21 to 34)**

The LMD CMA considered the methodology for assessing change in 'landscape value' as confusing, unclear and inappropriate for the predominantly uncleared landscape of the LMD CMA region. These concerns were addressed in the original LMD CMA submission.

The LMD CMA accepts that the intent of the recommended changes is to address these issues, but is concerned that they may not actually achieve the required outcome. The LMD CMA has concerns that the proposed changes may;

- constrict the adoption of a 'landscape approach' to management of vegetation
- adversely effect the operational and functional aspects of the assessment tools
- hinder the tools designed to meet the 'intent and objectives of the NV Act' by 'redlighting' proposals which clearly meet the 'improve or maintain' test
- not be based on sound scientific concepts or have incorporated new science

Fourteen changes have been recommended in this area, including;

1. removal of the 10ha ring,
2. the placement of the rings,
3. a change in weightings resulting from removal of the small ring,
4. an increase in the number of vegetation cover categories from 4 to 10,
5. a change in the way vegetation cover is scored (Table 5.2),
6. a change to the way connectivity is calculated,
7. a number of new Tables (5.3.1, 5.3.2a, 5.3.2b, 5.3.3, 5.4 [replaces old 5.3],
8. a change to the scoring of riparian areas (Table 5.5), and
9. the contribution of additional site value score towards Landscape Value

**The LMD CMA could not determine the impact of these changes sufficiently well to support their inclusion, without undertaking rigorous scenario testing to determine the full impact.**

Because of the complexity of the calculations and the unclear definitions/wording in the EOAM, it has not been possible for the LMD CMA to manually calculate the impact.

The LMD CMA is also concerned that some of the proposed EOAM changes may actually increase the problems they were intended to address. For example, with the use of three vegetation cover categories, there was concern that if a landholder wanted to clear 2 or 3 hectares within a 100hectare ring, and the 'landscape' was 29% cleared, that an offset would be needed for 'landscape value' as he went through the 30% 'hard edge'. However, if 31% was already cleared, he would not need to offset. Whilst the change to 10 cover categories was intended to address this, it will actually increase the amount of hard edges occurring and increase the chance of this happening threefold.

The original EOAM method was based on fairly standard and scientifically accepted species-habitat curves which show marked changes or thresholds at about 30% and 70% (little loss of species whilst remnant vegetation remains above 70% with a sharp decline between 70% & 30%, plateauing below 30%. The proposed EOAM changes diverge from this by making each 10% increment a threshold.

The LMD CMA suggested addressing this problem, not by modifying the scientific concept but by introducing an equation to represent the standard curves and using this to allow up to 30% of an area to be cleared at the top end, ie <30% cleared, reducing to 10% at the bottom end ie. >70% cleared with nothing if clearing is already >90%.

Without adequate testing it is not possible to determine if these changes will encourage or limit a landscape approach, although initial assessment suggest some of the changes such to that of the position of the rings will work contrary to a landscape approach.

Subject to further testing the LMD CMA is of the opinion that the changes will 'red light' proposals that offer large scale offsets and will not produce the potential benefits that can be achieved using a 'landscape approach'.

A 'landscape approach' would provide greater opportunity for innovative solutions, multi-property combinations, and adaptable multi-vegetation community approaches. Landholder and 'key interest' ownership of the outcomes and management requirements of offsets is difficult under the current complex system.

Recent biodiversity surveys on an area offset for clearing of paddock trees and small remnants three years ago, showed a remarkable range of species and a surprising number of threatened species (Val et al 2009). There is a real risk the proposed changes will curtail the benefits of this type of proposal in the future.

## **Threatened Species Tool**

### **5.5 Improve or maintain test for threatened species**

Whilst some positive improvements have been made throughout this section, the fundamental issues submitted by LMD CMA, namely that the strict criteria for the 'improve or maintain' test requirement to offset on a 'threatened species by threatened species' basis is preventing the protection of important threatened species habitat. The LMD CMA argued that the '*improve or maintain*' test needs to be made more flexible or adaptive. This could be achieved by being able offset a species listed as vulnerable with an endangered species or by offsetting for suites of species or assemblages rather

than on a species by species basis. This has not been addressed in the recommended changes and no feedback on this issue has been received from the Biodiversity Review group.

### **5.6 Identify whether any threatened species or are likely to occur.**

Definition of '**paddock trees**' and '**low condition**' vegetation. These definitions now appear fundamentally the same and do not allow any real distinction between paddock trees and low condition vegetation. There either needs to be a clearer separation of these, or both 'low condition' and 'paddock trees' can be addressed in the same manner in the tools.

### **5.9 Can any likely loss be offset? (item 100)**

The 'intent' and 'outcome' of this recommended change is unclear. LMD CMA proposed in their original submission that: in the LMD CMA region where the vast majority of properties are part of a large landscape of relatively intact and continuous native vegetation, the determination of local population for assessing of temporary loss being based on property boundaries is inappropriate and should be replaced by the use of a 3 or 5 km radius rather than property boundaries to determine 'local population'. The current recommended EOAM changes suggest that 'local population' is only to be considered on 0.55 km (100 ha) or 1.79 km (100ha) radius on large properties rather than on the larger property scale. This needs further explanation on how this proposed amendment would be used on large (30,000 ha) properties where the clearing and offset areas may stretch from 5 to 10 km. Scenario testing would be required to determine the impact of the proposed change.

It appears the system of assessment has now become so complex that while individual components of the tool may be based on sound science, the end result of applying the sum of all of the assessment tools within the LMD catchment, is detached from beneficial outcomes that could be achieved using a much simplified landscape approach such as the regional planning approach proposed by Freudenberger CSIRO (1997) and implemented under the Southern Mallee project.

## **POSITIVE RECOMMENDATIONS**

LMD CMA supports the following EOAM amendment recommendations.

### **5.3.1 The *improve or maintain* test (item 21)**

LMD CMA consider this a positive change that can alleviate perverse outcomes occurring where areas nominated by the landholder as a 'threatened species offset' do not contribute towards the Biometric offset due to their lower regional value, or in some cases cause a 'redlight' because they reduce the average regional value of the offset below that of the clearing area, even though the regional value 'improve or maintain' can be met by only using part of the total offset area.

### **5.3.4 Assessing site value (items 41 –50)**

The LMD CMA supports these recommendations. It is not clear however, if half scores will be calculated for current condition or if they can only be assigned when assessing the impact of management actions - Table 5.7 does not appear to make provision for half scores.

For the most part the other recommended changes appear positive and are supported by the LMD CMA.

## **LMD CMA WAITING LIST FOR CLEARING PVPs – IMPACT OF ONGOING TOOL CHANGES.**

The Lower Murray Darling CMA has Landholders who have been waiting two to three years to have their clearing proposals assessments completed. One of the main causes of this has been the ongoing changes to the assessment tools (PAMS/PVP Developer to PADACS/NVAT V2, V2.1, V2.2 and V3.0) and the data contained in these (change to number and classification of vegetation communities, revised threatened species data to align with new vegetation communities and correct data errors, revised Mitchell Landscape data etc).

Because of the scale of clearing proposals in the LMD region, the time taken for the assessment, negotiations and obtaining Owners Consent from the Department of Lands, can be anything from three months to a year.

Almost every time a change occurs to the data and tools during the assessment, negotiation and approval process it becomes necessary to go back and rerun some or all of the tools and produce a new draft PVP. When data has changed it may also be necessary to modify the proposal.

The regular changes over the past 18 months have made it very difficult for the LMD CMA to process a PVP from application to approval without having to recommence it. The main causes of the long waiting time is therefore primarily because the changes to the tool have been more frequent than the time required to assess, negotiate and approve a PVP.

It is therefore essential that if the recommended changes are adopted, they are fully trailed and tested before release to ensure there are no problems or unexpected perverse outcomes. Adequate time is also required before announcement and release date to ensure all PVPs in process can reasonably be completed.

**Paul Dixon**  
**General Manager**

*Lower Murray Darling Catchment Management Authority, May 2009*

### **References**

- LMD CMA (2008) Submission to the Biometric and Threatened Species Tool Review - Chapter 5 of the EOAM. January 2008.
- Fruedenburger D. Noble, J, Morton S (1997) A CARR System for the Southern Mallee of NSW. Report for DLWC and Southern Mallee Regional Planning Committee. CSIRO Division of Wildlife and Ecology.
- Val J. etal (2009) Monitoring the effectiveness of management actions in reserves - The establishment of monitoring sites on Prungle Station and the resurvey of the monitoring sites on Mendook Station and Oakdale Station Biodiversity Survey - Prungle NSW