# MOUNT MARY ROAD, EYNESBURY

# **TARGETED FLORA SURVEYS**

## Eynesbury Development Joint Venture Pty Ltd



Brett Lane & Associates Pty. Ltd. Ecological Research & Management 25 Burwood Road, Hawthorn, Vic. 3122 P.O. Box 74, Richmond, Vic. 3121 Ph. (03) 9815 2111 Fax. (03) 9815 2685

March 2013

Report No. 2004.43 (61.0)

## CONTENTS

1. INT	ITRODUCTION1			
2. METHODS				
2.1.	Existing Information			
2.2.	2. Survey Methodology			
2.3.	Limitations			
3. RES	SULTS, IMPACTS AND REGULATORY IMPLICATIONS	5		
3.1.	Results	5		
3.2.	Impacts	5		
3.3.	Regulatory implications	5		
3.3	3.1. Victoria's Native Vegetation Management Framework	5		
3.3	3.2. EPBC Act	7		
3.3	3.3. FFG Act	7		
3.3	3.4. DSE threatened species advisory list	7		
4. CONCLUSIONS AND RECOMMENDATIONS 8				
4.1.	Conclusions	8		
4.2.	4.2. Mitigation Recommendations			
5. REFERENCES				

## **FIGURES**

Figure 1: Location of rare & threatened flora and suitable habitat within the study area . 6



## **1. INTRODUCTION**

Eynesbury Development Joint Venture Pty Ltd engaged Brett Lane and Associates Pty Ltd (BL&A) to undertake targeted surveys for the following threatened flora species, listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and/or the *Flora and Fauna Guarantee Act 1988* (FFG Act), along Mount Mary Road and Ballan Road, Eynesbury (see Figure 1):

- Button Wrinklewort (optimal survey period: late spring to summer)
- Clover Glycine (optimal survey period: December to February)
- Large-fruit Fireweed (optimal survey period: August to October)
- Narrow Goodenia (optimal survey period: October to March)
- Small Scur-pea (optimal survey period: (October to January)
- Spiny Rice-flower (optimal survey period: April to August)

It was anticipated that targeted surveys for the above-listed flora species would also determine the status of the following threatened flora species, listed on the Department of Sustainability and Environment's (DSE) *Advisory List of Rare or Threatened Plants in Victoria* (DSE 2007a), in the study area:

- Arching Flax-lily;
- Austral Crane's-bill;
- Basalt Tussock-grass;
- Curved Rice-flower;
- Flat Spike-sedge;
- Half-bearded Spear-grass;
- Pale Spike-sedge;
- Perennial Blown-grass;
- Plains Joyweed;
- Rye Beetle-grass.
- Slender Bindweed; and
- Slender Tick-trefoil.

A previous assessment (BL&A 2012a) identified potential for these listed species to occur in the study area. This report also incorporates the findings of an earlier targeted survey for Spiny Rice-flower (BL&A 2012b).

The aims of the current survey were to:

- Identify any presence (and locations) within the study area of the above-listed threatened flora species;
- Determine any impacts of the proposed development on recorded listed values;
- Outline implications of findings under relevant federal, state and local legislation and policies; and



 Provide recommendations for the mitigation and management of potential impacts on any individuals of threatened flora recorded on site.

This report is divided into the following sections:

**Section 3** describes the sources of information and methods used for the targeted surveys.

**Section 4** presents the targeted survey results, and discusses the implications of the findings under relevant legislation and policies.

**Section 5** presents the conclusions of the investigation and provides recommendations to assist the development of a minimum impact proposal.

This investigation was undertaken by a team from Brett Lane & Associates Pty Ltd, comprising Brett Macdonald (Senior Ecologist) and Inga Kulik (Senior Ecologist & Project Manager).



## 2. METHODS

This section describes the methods employed for the targeted surveys including sources of information reviewed to maximise the effectiveness of the survey.

#### 2.1. Existing Information

The following previous reports of the study area were reviewed prior to the current site inspection:

- BL&A, Flora, Fauna, Habitat Hectare Assessment and Net Gain Analysis of the Study Area (BL&A 2012a); and
- BL&A, Spiny Rice-flower Targeted Survey of the Study Area (BL&A 2012b).

The BL&A 2012a report outlined areas within the study area that potentially supported the targeted listed species, provided reasoning for this (including a review of past species records in the broader area), and the findings of the 2012b report were incorporated in this current report.

#### 2.2. Survey Methodology

Targeted surveys for threatened flora were conducted on the following dates for the following species to ensure the greatest chance of visual detection:

- First survey on the 10<sup>th</sup> July 2012 for:
  - Spiny Rice-flower.
- Second survey on 11<sup>th</sup> November 2012 for:
  - Large-fruit Fireweed;
  - Small Scurf-pea; and
  - Narrow Goodenia.
- Third survey on 20<sup>th</sup> December 2012 for:
  - Button Wrinklewort;
  - Clover Glycine;
  - Narrow Goodenia; and
  - Small Scurf-pea.

During the above surveys, all areas of native vegetation within the study area considered as suitable habitat for the above-listed species (Figure 1) were visually searched along transects spaced approximately five metres apart. Given the condition of the vegetation and optimal timing of the survey (i.e. during the regular flowering period for the targeted species), this spacing was considered appropriate for detecting the species. All observed listed rare or threatened plants, were marked with a hand-held GPS to an accuracy of approximately ±five metres. Specimens requiring identification using laboratory techniques were collected.



#### 2.3. Limitations

Flora targeted surveys usually fail to record all species present for various reasons, including the seasonal absence of some species and short survey duration.

Detailed targeted flora surveying was carried out within the usual flowering time for all of the target species. The timing of the surveys and the condition of the vegetation was considered appropriate to determine the presence or absence of these species.

Some areas surveyed had been significantly grazed down by both native (e.g. kangaroos) and introduced herbivores (e.g. rabbits and hares). Additionally, some paddocks had high stocking rates and had been grazed fairly heavily by livestock. However, the level of grazing onsite was not considered intensive enough to significantly reduce the visual detectability of targeted species.



## 3. RESULTS, IMPACTS AND REGULATORY IMPLICATIONS

#### 3.1. Results

Four Spiny Rice-flower plants were recorded in the study area during the current investigation, within Habitat Zone B (Figure 1). Two of these plants were recorded during the first survey and two during the third. No other rare or threatened plant species were recorded in the study area.

The Basalt Tussock-grass individual recorded in Habitat Zone G (BL&A 2012a) was re-examined and confirmed to be Common Tussock-grass, which is not listed as rare or threatened.

#### 3.2. Impacts

The proposed road widening works would result in the destruction of all four Spiny Rice-flower plants in Habitat Zone B.

#### 3.3. Regulatory implications

The regulatory implications discussed below are based solely on the abovementioned impacts on rare or threatened flora. Implications regarding the broader issues of the proposal are provided in previous reports and must also be considered.

#### 3.3.1. Victoria's Native Vegetation Management Framework

The presence of rare or threatened species in a habitat zone can alter the conservation significance of that habitat zone. This is based on an assessment of the 'best or remaining 50%' of habitat for rare and threatened species as prescribed by DSE (2007b). However the results of the targeted flora surveys did not alter the conservation in any habitat zone in the study area. The reason for this was that all habitat zones in the study area have been increased to the maximum conservation significance of very high by the conformation of all habitat zones (except E) as best 50% Golden Sun Moth habitat.





## Legend

Study Area

Threatened Flora Species Habitat Surveyed (EVC 132 & EVC 649)

🛠 Spiny Rice-flower

0 150 30		tres
Figure 1:Stud	ly Area & Rare o	r Threatened Flora
Project: Eynes	bury Development	t
Client: Eynesb	ury Pty Ltd.	
Project No.: 2004.43	Date: 07/01/2013	Created By: B. MacDonald / M. Ghasemi
BL&A	Brett Lane & Associates Pty- Ecological Research & Manager	
<ul> <li>Experience</li> <li>Knowledge</li> <li>Solutions</li> </ul>	25 Burwood Rd, Hawthorn PO Box 74, Richmond VIC 3121 Australia	ph (03) 9815 2111   fax (03) 9815 2685 blane@ecologicalresearch.com.au www.ecologicalresearch.com.au

#### 3.3.2. EPBC Act

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) contains a list of threatened species and ecological communities that are considered to be of national conservation significance. Any impacts on these species considered significant requires the approval of the Australian Minister for the Environment. If there is a possibility of a significant impact on nationally threatened species or communities or listed migratory species, a Referral under the EPBC Act should be considered. The Minister will decide after 20 business days whether the project will be a 'controlled action' under the EPBC Act, in which case it cannot be undertaken without the approval of the Minister. This approval depends on a further assessment and approval process (lasting between three and nine months, depending on the level of assessment).

According to the significant impact guidelines for Spiny Rice-flower (DEWHA 2009), the current proposal is unlikely to have a significant impact on this species due to the proposed removal of less than five isolated plants. Therefore, with regards to the Spiny Rice-flower, the provisions of this Act would not apply to the current proposal.

#### 3.3.3. FFG Act

The Victorian *Flora and Fauna Guarantee Act* 1988 (FFG Act) lists threatened flora and fauna species to provide for their protection and management. The FFG Act has limited direct application to private land. However, Clause 15.09 of the Planning Scheme makes reference to this Act. The local planning authority is likely to consider impacts on FFG Act-listed species and communities when deciding on planning permit applications.

A license under the FFG Act would be required to remove the four Spiny Riceflower plants from the study area.

#### 3.3.4. DSE threatened species advisory list

Rare and threatened species advisory lists administered by the Department of Sustainability and Environment include flora and fauna species known to be rare or threatened throughout the state. Although the advisory list has no statutory status, the Responsible Authority will consider impacts on any species on the list when assessing a planning application.

The Responsible Authority would consider any impacts on the four Spiny Riceflower plants (listed as endangered on the Advisory List) in the study area when assessing the planning application for the project.



## 4. CONCLUSIONS AND RECOMMENDATIONS

#### 4.1. Conclusions

During the current investigation, four Spiny Rice-flower plants were recorded in the Mount Mary Road reserve, within Habitat Zone B (described in BL&A 2012a). As a result, the following legal implications regarding Spiny Rice-flower would pertain to the current proposal:

- A Referral under the EPBC Act would not be required to remove the four Spiny Rice-flower plants from the study area;
- A license under the FFG Act would be required to remove the four Spiny Riceflower plants from the study area;
- The Responsible Authority would consider any impacts on the four Spiny Riceflower plants (listed as endangered on the Advisory List) in the study area when assessing the planning application for the project; and
- The conservation significance of all habitat zones in the study area remains un-altered by the results of these targeted surveys.

#### 4.2. Mitigation Recommendations

Prior to their destruction, it is recommended that the four Spiny Rice-flower plants in Habitat Zone B be translocated to secure suitable habitat nearby. This would require the preparation of a translocation plan for the operation.



### 5. REFERENCES

- Brett Lane and Associates Pty Ltd 2012a, Mount Mary Road, Eynesbury: flora, fauna, habitat hectare assessment and net gain analysis, Report No. 2004.43 (58.1), Brett Lane and Associates Pty Ltd, Hawthorn, Victoria.
- Brett Lane and Associates Pty Ltd 2012b, *Mount Mary Road, Eynesbury: targeted Spiny Rice-flower survey, Report No. 2004.43 (59.0)*, Brett Lane and Associates Pty Ltd, Hawthorn, Victoria.
- Department of Sustainability and Environment 2007a, Advisory List of Rare or Threatened Plants in Victoria. Department of Sustainability and Environment, East Melbourne, Victoria.
- Department of Sustainability and Environment 2007b, *Native Vegetation: Guide* for assessment of Referred Planning Permit Applications. Department of Sustainability and Environment, East Melbourne, Victoria.
- Department of the Environment, Water, Heritage and the Arts 2009, Significant Impact Guidelines for the Critically Endangered Spiny Rice-flower (Pimelea spinescens subs. spinescens), Australian Government, Canberra.

