

**Bremer Bay Point Henry Vegetation Mapping and Management Project**



**Nathan McQuoid and Gary McMahon**  
**For the Shire of Jerramungup**



## **Bremer Bay Point Henry Vegetation Mapping and Management Project**

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### Cover images:

Participants discuss vegetation management in asset protection zones, Point Henry Peninsula, residents fire protection field day, November 2016. Image K. Roberts.

Very old and open tallerack mallee shrubland, Reserve 51949. Image N. McQuoid

Very old peppermint low closed woodland, Reserve 511. Image N. McQuoid

Bremer grevillea (*Grevillea nivea*) Reserve 511, Conservation Priority 2. Image N. McQuoid

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## Introduction

The Shire of Jerramungup commissioned Nathan McQuoid and Gary McMahon to undertake the Bremer Bay/Point Henry Vegetation Mapping and Management Project.

The project brings together the often-disparate themes of vegetation conservation ecology and bushfire hazard management, to develop mitigation solutions in a landscape recognised for its significant biodiversity. It provides a structured assessment-based understanding of vegetation community diversity, distribution, disturbance and biomass development patterns, and recommends how to achieve and maintain long-term biomass fuel reduction *and* the conservation of amenity, culture, heritage and nature.

It identifies a range of vegetation community disturbance response-based criteria, identifies techniques to test and compare biomass hazard reduction methods, and recommends and describes practical and durable vegetation management methods for reducing bushfire hazard.

The assessment of vegetation communities was undertaken using an industry-accepted survey and mapping method of the distribution, composition and structure of the communities. This assessment, together with the results of considered consultation and a review of relevant literature, forms the basis of vegetation management and bushfire protection guide for community and land managers.

The project took into account existing plans, schemes and strategies, legislation, policies and standards. It reflects primary protection for life and property, as a balance with the protection of community, infrastructure, cultural, natural, heritage and amenity values. It identifies and recommends effective methods and innovative opportunities to reduce and manage bushfire hazards.

The project meets the aspirations of the Shire of Jerramungup Community Strategic Plan 2016-2021 (Shire of Jerramungup 2016), the UNESCO Man and Biosphere Objectives (UNESCO 1996).

The project takes account of the community's value of the vegetation and its amenity, character, cover, and natural diversity. It recognises that the vegetation can also be a fire hazard, which requires consideration and mitigation in balance with the values, in this regard the project considers lowest bushfire hazard as a community value.

The Project's overall aims are:

- *To reduce the fuel loads in Point Henry rural residential area and Reserve 511 in the long term whilst maintaining amenity and conservation values.*
- *Provide landowners with practical, easily understood guidance on how to reduce fuel loads on their property both in the Building Protection Zones and the balance of the Title.*
- *Provide information to inform the preparation of a Fire Management Plan for Reserve 511 and Reserve 51949 (Bremer Bay Town Centre).*
- *Test various mitigation methodologies over time against agreed criteria.*

The specific scope of the project was to:

1. *Identify existing vegetation communities in Reserve 511, Reserve 51949 and Point Henry;*
2. *Identify any threatened or priority listed flora, vegetation communities and fauna, particularly along previously identified, proposed strategic breaks;*
3. *Describe vegetation community regeneration behaviours;*
4. *Outline bushfire hazard mitigation/biomass reduction and maintenance methodologies and differences;*
5. *Describe the vegetation community's response to various bushfire mitigation as hazard management/biomass reduction methods;*
6. *Recommend appropriate bushfire management response to the vegetation communities bearing in mind:*
  - a. *Protecting life and property is the number 1 priority*
  - b. *Resourcing and practicality;*
  - c. *Time taken to achieve this response;*
  - d. *The likely capabilities of the responsible party; and*
  - e. *Conservation of amenity, biodiversity and cover.*
7. *Prepare easily understood information for individual landowners on best practice mitigation process for the vegetation communities present including (but not limited to):*
  - a. *Plans and images to guide the establishment and maintenance of Building Protection Zones in the various vegetation communities;*
  - b. *A variety of 'prescriptions' for the individual landowners in the Point Henry Rural Residential area for caring for the balance of their Title outside of the Building Protection Zone.*
  - c. *Additional information on local weed species, erosion control, landscape protection and hygiene.*
8. *Information on best practice bushfire mitigation in an easily understood format for use by:*
  - a. *Agency land managers for crown land;*
  - b. *Shire of Jerramungup staff for use in managing crown reserves (particularly 511) and road reserves;*
  - c. *Local VES unit and the regional DFES office to inform bushfire mitigation programs in Unallocated Crown Land and in broader planning; and*
  - d. *All information prepared will inform the Shire-wide Bushfire Risk Mitigation Plan (BRMP) to be developed over the next year.*
9. *Provide specific recommendations to inform a future fire management plan for reserves 511 and 51949 including information on hygiene when working in the various vegetation communities present.*
10. *Prepare a methodology and program for testing the ongoing effectiveness of the various mitigation methods in each vegetation community with the test criteria to be developed as part of this project.*