



Draft Community Proposal for “Hawthorn Green Space” Recreational Area, within a Endangered Ecological Community of Box Gum Woodland, by Murrumbateman Landcare Group (MLG) in consultation with Murrumbateman History Group (MHG)

Prepared by Jacqui Stol, President MLG, March 2015

Request for consideration of proposal

MLG and the Murrumbateman History Group would like to request that this proposal be given careful consideration by the Yass Valley Council in their future development of this site. Its implementation would achieve a number of significant objectives in the Murrumbateman Master Plan and YVC legislative responsibilities as well as community health and environmental benefits (see relevant paragraphs for details). MLG and MHG would be willing participants in planning and implementation of the proposed Green Space for Murrumbateman in conjunction with YVC and other interested groups.

Background

The Hawthorn property is located just north of the village of Murrumbateman along the western side of the Barton Highway towards Yass. In 2010 McClung family sold their 880 property “Hawthorn” to the Yass Valley Council. As part of the sale the family were given five years to lease back the property allowing them time to remove generations of family possessions from the property. Yass Valley Council expects to take possession of the property in October 2015.

Over time all but three large paddocks have been cleared of most of their overstorey and understorey native vegetation for agricultural purposes. The majority of the property consists of sown exotic pastures and the occasional paddock tree however four paddocks (3 grazing paddocks and a laneway) have very fortunately retained either native groundlayer or overstorey of significant areas of the Endangered Ecological Community Box Gum Woodland (BGW).

Three large paddocks (Top Tank, Tank and Lambing Paddocks) contain a very significant number of 100+ very old large trees, representing an excellent regional example of a increasingly rare remnant of Yellow Box and Blakely’s Red Gum, estimated to be on average 300-500+ years old, which have become the home to a number of birds and other native wildlife. Our short once-off survey in Spring 2014 identified numerous active bird activities with 27 species of birds actively foraging, nesting, and using the trees and paddock as habitat. Birds observed included vulnerable species such as the Superb Parrot and declining woodland birds such as the Varied Sitella and White-winged Triller.

Vision for the future – Green Space for the Yass Valley Shire and the Murrumbateman Community

Approximately 50ha of paddocks at Hawthorn can be classified as an BGW Endangered Ecological Community in reasonable condition. The groundlayer of the Laneway is in very good condition, whereas the standing trees of the main three paddocks are the primary ecological feature with groundlayer dominated by exotics but with sufficient native species and area to fall within the legislative definition of an EEC BGW at both NSW state and Federal legislative levels.

It is envisioned that with a working partnership between Murrumbateman Landcare, Capital Region Greening Australia, Yass Valley Council (YVC) and the local Murrumbateman community together the existing Box Gum Woodland can be replanted and restored, encouraging native wildlife to return in greater numbers to the area. The inclusion of riding and walking paths, open areas for recreational activities including picnic and rest areas will potentially make the area a vibrant and well used local recreational community facility. Possibly even popular community features such as a 'dog park' could be incorporated.

Map of proposed Green Space at Hawthorn

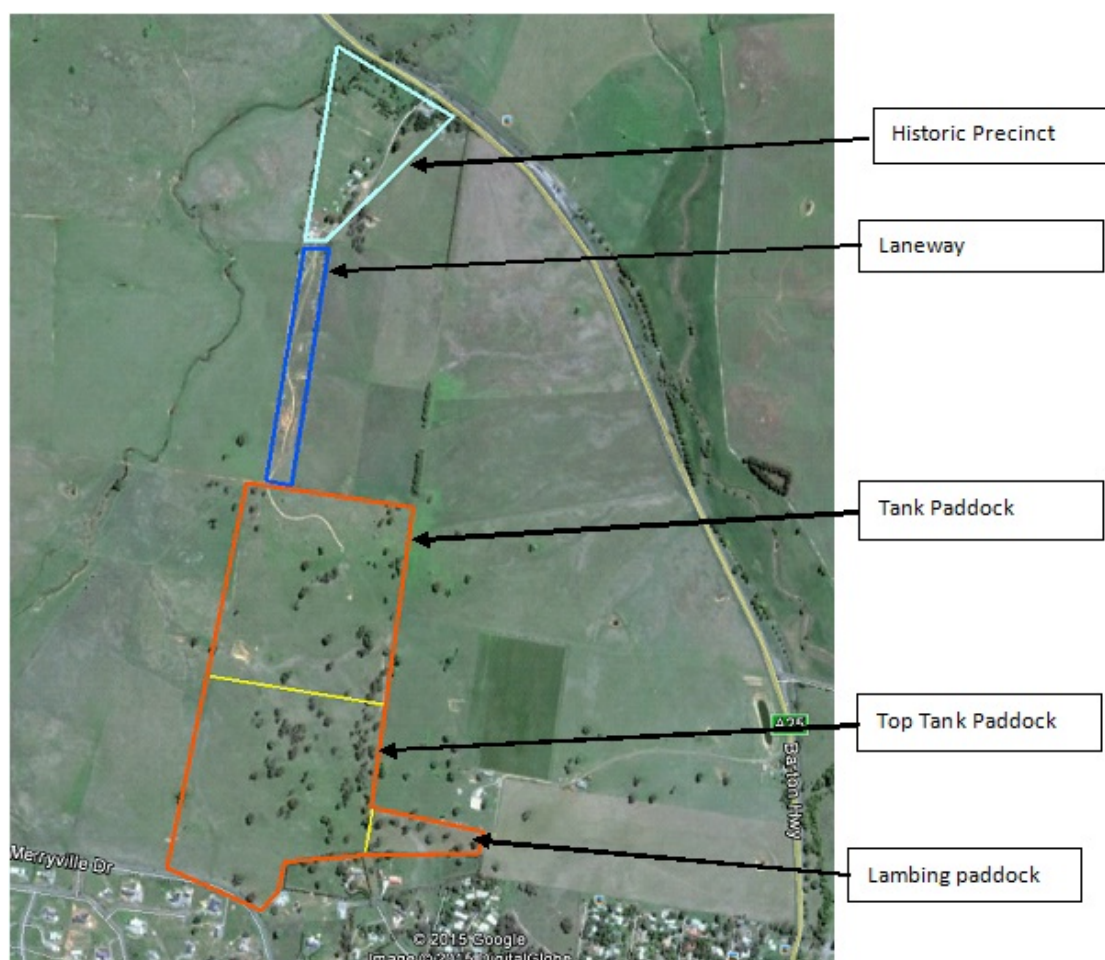


Fig. 1 Image of the proposed 4 paddocks in Hawthorn with the Barton Highway on the easterly side and village houses on the southerly end of the proposal. The historic precinct includes the farm buildings such as the main homestead, gardens, blacksmiths etc.

In the image, the dark blue polygon indicates the laneway (4ha). This paddock has a good ground layer of native plants due to its history of only being occasionally grazed with no cropping or sowing of any exotic pasture plant species. It also acts as a link from the green space (red polygons) to the

historic precinct (light blue polygon). It would be suitable to include, and definitely recommended, from an ecological/recreational perspective

The two yellow lines within the red polygon are internal boundary fencing making up three paddocks. The three paddocks are known as the Tank and Top Tank Paddocks as well as the lambing paddock at the top of the new Fairley development. If a stage development is recommended for restoration then they could be sub-divided / managed differently along these boundaries.

In order of most ecologically valuable the paddocks in order would be:

- The southern large paddock (Top Tank Paddock) is the most ecologically valuable with 50+ large old trees with hollows but ground layer limited native spp.
- The dogleg (Lambing Paddock)
- The laneway (good native groundlayer spp diversity but 'derived grassland' no trees)
- The northern paddock (Top Tank Paddock), with more limited tree and groundlayer but never the less still with significant value.



Fig. 2 Image taken in Tank Paddock looking south showing the number and size of the remaining old large trees in this endangered Box Gum Woodland

Contribution to Murrumbateman Masterplan Objectives

The Draft Murrumbateman Masterplan 2031 has identified the two paddocks (Tank and Top Tank Paddocks) as suitable for recreational use. This report contributes strongly to the Masterplan Objectives by assisting in the provision of the following:

It can assist in providing for the orderly, logical and sustainable growth of the Village in accordance with an agreed vision &:

- protect the amenity of existing residential development
- optimise opportunities for future residential development (by having key recreational green space adjoin development)

It will potentially assist ensuring the future environmental sustainability of the Village by:

- having had identified, preserved and protected a key part of the ecological resources within and adjoining the village
- assisted in issues related to efficient water management

- helping identify and create opportunities for Ecologically Sustainable Development initiatives

It would provide support to the social and cultural life of the Village by:

- Providing a large area of appropriate community and recreational facilities for the current and future citizens of the Village
- Be a key part of creating a functional and attractive public realm which will encourage residents to spend time and money in the Village and attract visitors

The contribution of this proposal to YVC Legislative responsibilities

All land managers and users have a legislative responsibility at the state and federal level to protect and ensure the maintenance of biodiversity and ecosystem function of sites defined as a Box Gum Woodland, which is classified as a Critically Endangered Ecological Community.

Although the plant groundlayer of this proposed area is not species rich for the majority of the area (excepting the laneway) and the brief survey so far has identified the required numbers of native plant forb species (12 spp under Federal legislation) it fulfils the criteria under the NSW legislative guidelines the White Box Yellow Box Blakely's Red Gum Woodland as an Endangered Ecological Community (EEC) under the NSW Threatened Species Conservation Act 1995 (TSC Act). This proposed site would be certainly regarded as falling under these guidelines for those following reasons:-

Where the Box-Gum Woodland remnant is in less than pristine condition it is still considered part of the EEC as long as the site has at least part of its natural soil and seedbank intact, so that under appropriate management it would respond to assisted natural regeneration. Therefore the Box-Gum Woodland EEC can include the following condition where the trees are present as a canopy with a non-native groundlayer.

Also depending on the local extent and condition of Box-Gum Woodland, isolated box or gum trees scattered across a paddock may also form part of the EEC. This is because these few remaining trees may be providing important hollow and nectar resources for fauna, they may be an important seed source for regeneration or they may be acting as 'stepping-stones' for fauna moving between larger, more complex Box-Gum Woodland remnants across an otherwise cleared landscape. The 100+ trees that occur on this site also mean this site fulfils the criteria under this definition.

This area of Box-Gum Woodland is typically located for these vegetation communities on the fertile lower parts of the landscape where resources such as water and nutrients are abundant. This means that Box-Gum Woodland trees here have grown very large (many are around minimum 1 to 1.5m DBH), and have developed hollows of all sizes.

Hollows, including those in dead trees, have been identified in the scientific literature as critical but declining. They are extremely important for a significant number and range of faunal species such as parrots (the Superb Parrot was recorded at this site), owls and bats. The availability of nutrients and water also means that Box-Gum Woodland trees have relatively reliable nectar flows and foliage growth. This makes them essential resources for nectar-feeding and insectivorous birds and bats. A range of woodland birds, bats and insectivores that occur in these woodlands are now also threatened.



Fig. 3 Large trees with diameters of this size are rare in the Yass Valley landscape and also regionally uncommon

National / Federal Guidelines defining a Box Gum Woodland

White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland are listed as a critically endangered ecological community under the federal Environment Protection and Biodiversity Conservation Act 1999. The ecological community can occur either as woodland or derived native grassland (i.e. grassy woodland where the tree overstorey has been removed).

High ecological value due to potential native seed bank once stock are removed, patches of native grasses and occasional native forbs with many high quality species present in the laneway and important components of habitat for fauna – numerous outcrops of bush rock (granite boulders), fallen timber, significantly large paddock trees with numerous hollows.



Fig. 4 Example of proposed usage. Note that the final design would be a consultative process in conjunction with expert planners, YVC, community groups etc. The type of design and planning could potentially incorporate areas for designated recreation area, woodland restoration (green circles), tracks and paths (blue lines).

Health benefits of 'Green Space'

Dr Kate Matysek, the National Policy Advisor, Heart Foundation has reviewed the scientific evidence for 'green space' and has found many benefits a selection of which are presented here.

- Natural environments offer low-cost preventative and remedial opportunities for public health (Maller, Townsend et al. 2002).
- Children and adults benefit so much from contact with nature that land conservation can now be viewed as a public health strategy (Frumkin and Louv 2007).
- Both physical activity and exposure to green space are known separately to have positive effects on physical and mental health (Pretty, Peacock et al. 2005)
- Walking in forest environments are beneficial to heart health and blood pressure. The walking activity in an urban environment does not produce the cardiovascular improvements of walking in a forested environment. These findings have major implications for how we view exercise and its place in the modern urbanised world. Li (2011) European Journal of Applied Physiology 111: 2845-2853.

The pro's and con's of 'Active' and 'Passive' Open Space

Active recreation spaces require high costs to develop and require intensive management, maintenance. Passive recreation, in the form of this proposal for green space, has an emphasis on open space component of park, allows for conservation, restoration and enhancement of natural Box Gum Woodland habitat. It requires little management and is lower cost. Proposals such as this reduce the burden of managing active recreation facilities & developed infrastructure.

Results from the Hawthorn Survey - 9th November 2014

The Murrumbateman Landcare Group conducted a bird and vegetation survey on the Hawthorn paddocks & property to identify the native flora and fauna in the four paddocks although other paddocks were not ruled out for inclusion. The following species were identified on a 2.5hr morning survey. 3 species are of significant conservation status - the Superb Parrot, Rufous Whistler and White Winged Triller.

Bird Species

Superb Parrots	Brown Falcons
Rufous Whistler	White Winged Triller
Eastern Rosellas	Dusky Woodswallow
Crimson Rosellas	Horsfields Bronze Cuckoo
Varied Sitella	Striated Pardalotes
Red-rumped Parrots	Welcome Swallows
Yellow-rumped Thornbill	Willie Wagtail
White Rumped Martins	Australian Magpie-lark
Sulphur Crested Cockatoos	Black Faced Cuckoo Shrike
Galahs	Red Wattle Bird
Corella	Australian Magpie
Kookaburras	Superb fairy Wren
European Starlings	House Sparrow
Australian Ibis	

Trees

Yellow Box.....	<i>Eucalyptus melliodora</i>
Blakely's Red Gum.....	<i>Eucalyptus blakelyi</i>

Native Grasses and forbs

Common Speargrass.....	<i>Austrostipa scabra</i>
Speargrass.....	<i>Austrostipa bigeniculata</i>
Weeping Grass.....	<i>Microlaena stipoides</i>
Kangaroo Grass.....	<i>Themeda australis</i>
Wallaby Grasses.....	<i>Austrodanthonia spp.</i>
Common Wheatgrass.....	<i>Elymus scaber</i>
Native Dock.....	<i>Rumex brownii</i>
Native Geranium.....	<i>Erodium crinitum</i>
Native Bluebell.....	<i>Wahlenbergia sp.</i>
Common Everlasting daisies.....	<i>Chrysocephalum apiculatum</i>
Common Woodruff.....	<i>Asperula conferta</i>
Blue Devil.....	<i>Eryngium ovinum</i>
Wattle Matrush	<i>Lomandra multiflora</i>
Creeping Bindweed.....	<i>Convolvulus erubescens</i>

Annual Exotic Grasses and weeds

Rye Grass.....	<i>Lolium sp.</i>
Silver Grass.....	<i>Vulpia spp.</i>
Barley Grass.....	<i>Hordeum sp.</i>
Clover and medics.....	<i>Trifolium and Medicago spp.</i>
Brome.....	<i>Bromus molliformis</i>
Fog Grass.....	<i>Holcus lanatus</i>
Blown Grass.....	<i>Aira</i>
Phalaris (perennial).....	<i>Phalaris aquatica</i>
Flatweeds.....	<i>Hyperchaeris radicata and H. glabra</i>