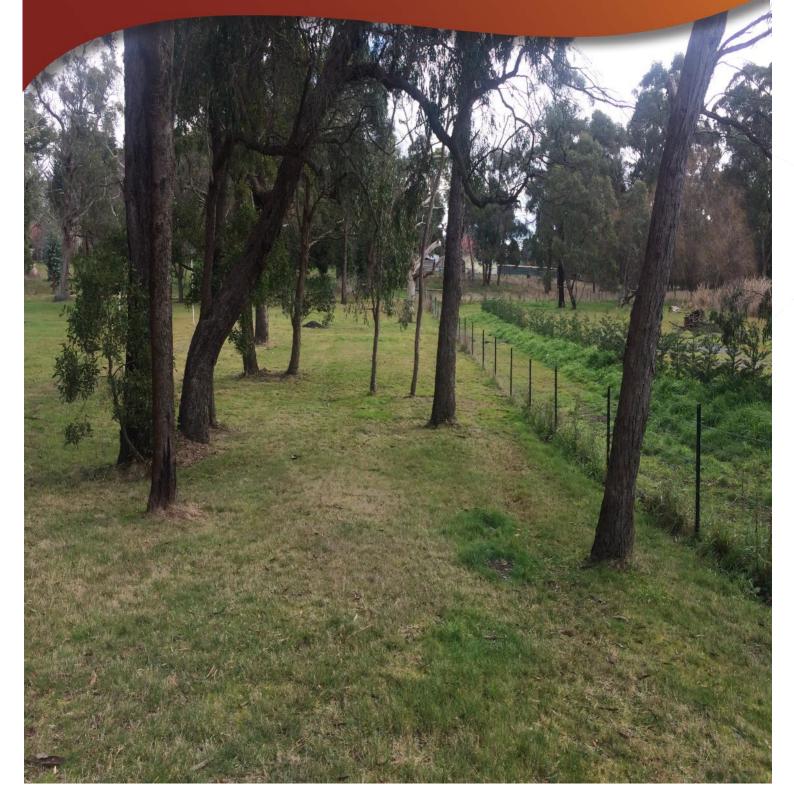


Browning Street Conservation Reserve Action Plan

Adopted by Council - 25 October 2017



Contents

Vision	. 2
Site location	. 2
Site description	. 3
Site history	. 7
Black Gum description	. 7
Environmental Significance	. 8
Legislative context	. 8
Federal	8
State	8
Local	8
Cultural Heritage	11
Threats and issues	11
Community Consultation	13
Management Actions	14

Vision

The Browning Street Conservation Reserve will be a conservation area that protects and enhances the site's ecological values, including the nationally threatened Black Gums (Eucalyptus aggregata), by managing threats, establishing the conditions for natural regeneration and facilitating eco-system restoration.

Site location

Browning Street, Woodend is an unmade road reserve that extends between Bowen Street and Ladye Place in Woodend. The area has not been previously managed as a conservation reserve or a road reserve.



Figure 1: Location of Browning Street Conservation Reserve, Woodend

Site description

The canopy trees at the site consist of Black Gums (*Eucalyptus aggregata*) and other eucalypts that are scattered across the site. The understorey is dominated by pasture grasses such as cocksfoot (*Dactylis spp.*). There are a few native understorey species in patches throughout the site such as Chocolate Lilies (*Anthropodium fimbriatum*), Willow Herb (*Epilobium spp.*), Bidgee Widgee (*Acaena novae zelandiae*), Fire Weed (*Senecio spp.*) and Saw-sedge (*Gahnia spp.*).

There are a scatter of weeds (herbaceous and woody) across the site but no dense infestations. The weeds observed were Pines (*Pinus radiata*), willows (*Salix spp.*), a plum tree (*Prunus spp.*), Hawthorn (*Crataegus monogyna*), Blackberry (*rubus fruticosus aggregate*), Cape Broom (*Genista monspessulana (L.*), Ivy (*Hedera spp.*) and buttercup (*Ranunculus spp.*).

The site is located in the Central Victorian Uplands Bioregion. The Ecological Vegetation Community present at this site is Swampy Riparian Woodland (EVC: 83). Swampy Riparian Woodland (EVC: 83) has a conservation status of "endangered".

There are no known locations / reference sites around Woodend that contain an intact high quality remnant patch of Swampy Riparian Woodland. Most remnant areas have been disturbed by pasture improvement, grazing, weed invasion or constant mowing. However, there are small pockets with intact vegetation under threat by perennial grassy weed cover or woody weeds which provide enough information to understand this vegetation community. Based on these small areas of intact vegetation it is evident that this vegetation community within the floodplains of Five Mile Creek is dominated by swampy eucalypts, scattered shrubs and a grassy/herb understorey.

The reserve is currently partly fenced. Where boundary fencing exists, this mainly comprises post and wire farm fencing. Solid, 1.8 metre high Colorbond and timber paling fencing has been installed along the north-west and south east boundaries. North-south fencing has also been installed across the reserve in one location which results in the reserve appearing to form part of the adjoining private garden.

There is a narrow reserve running north-south between Mount Macedon Road and Five Mile Creek. This acts as a drainage line and is also vested in Council. It is intended that this reserve remain as is. East-west fencing across the drainage line may be required where it does not exist to provide security for the adjoining private property. The need or otherwise for north-south fencing along the drainage line could be considered in the future if public access was contemplated or delineating the public reserve from the adjoining private property was considered necessary.



Figure 2: Aerial of Browning Street Conservation Reserve, Woodend



Figure 3: Solid fencing along the south east boundary with 24Browning Street, Woodend



Figure 4: farm style post and wire fencing along the north boundary of the reserve



Figure 5: north-south fencing restricting public access and incorporating the reserve into the adjoining private garden



Figure 6: fire patches and play equipment in the reserve

Site history

The land was identified as a street on a Plan of Subdivision in 1927. No physical access was required at the time and, therefore the road was never constructed. Nor was the land vested in Council. Over time, adjoining land owners took varying degrees of interest in accessing, occupying and managing the land. More recently, vehicular access was granted to two properties at the eastern end of the reserve. The land is now vested in Council.

Black Gum description

Black Gums (*Eucalyptus aggregata*) dominate forests and woodlands that are usually wet, swampy areas or watercourses (frost pockets). *Eucalyptus aggregata* (**Figure 7**) morphological features include:

- Grows to 18 metres. In forested areas in the upper slopes, *E. aggregata* is a tall tree with an upper canopy. In riparian areas on the lower slopes of Five Mile Creek the canopy spreads broadly with lower hanging branches.
- The bark is rough, fibrous and greyish to brown/black all the way to the outer branches, changing to smooth greyish to cream coloured.
- Adult leaves are long and alternating.
- Buds exist in a cluster of seven. They are diamond shaped with a short stem.
- Fruit retain the cluster of seven.



Figure 7: Mature Eucalyptus aggregata (left); bark rough and fibrous (centre); adult leaves alternating (bottom centre); Buds in a cluster of seven (top right); juvenile leaves (centre right) and fruit (bottom right).

Environmental Significance

This site is one of 30 known small populations of Black Gums found within 4 kilometres of the Woodend township. Woodend contains the only known population of Black Gums in Victoria making these 30 sites of state and local significance.

Many areas around Woodend have been significantly disturbed and, therefore, require environmentally sensitive management to protect the species. Macedon Ranges Shire Council's objective is to manage Browning Street's Black Gum area for its conservation value as a part of the Woodend community's reserve system.

Legislative context

Federal

Black Gums (*Eucalyptus aggregata*) are protected under federal, state and local legislation. Black Gums are listed as vulnerable under the *Environmental Protection and Biodiversity Conservation Act 1999.* This means federal approval may be required for removal of any of the species.

State

In Victoria the Black Gum is listed as threatened under Victoria's *Flora and Fauna Guarantee Act, 1988.* An Action Statement was completed in 2004 listing management actions to protect the species. Actions relevant to the future management of the subject site include:

Action 4 – Roadsides

Facilitate natural regeneration of Black Gum by controlling woody weeds and avoiding seedlings during slashing (except on road verges) as resources allow.

Action 8 – Council Reserves

Establish a Public Authority Management Agreement or other management regime for these reserves that ensures natural regeneration by:

- controlling woody weeds;
- erecting appropriate fencing;
- removing exotic trees, and
- promoting recreational, tourist and educational potential compatible with conservation.

Local

The Black Gums are protected by the *Planning and Environment Act 1987* under local Vegetation Protection Overlay 1 (VPO1). VPO1 covers most of the floodplain areas of Five Mile Creek and Slatey Creek where the Black Gums were surveyed in 1994. **Figure 8** shows the extent of VPO1 across Browning Street (VPO1 in orange). This population extends through all of the adjoining properties and is a part of the Five Mile Creek reserve to the north.

Under VPO1 a permit is required to remove, lop or destroy a Black Gum. The aim of this overlay is 'to protect all remnant Black Gums and conserve the habitat and environs of this species of eucalypt'.

The other local planning overlays relevant to the site are Land Subject to Inundation 1 (LSIO1) and Environmental Significance Overlay 4 (ESO4). **Figure 9** shows the extent of LSIO1 which applies to the areas around Browning Street subject to flooding. This land comprises the natural swampy woodlands where Black Gums are found around Woodend. Construction of any footpath will need to be designed taking into account possible flood events.



Figure 8: Vegetation Protection Overlay 1 (VPO1)

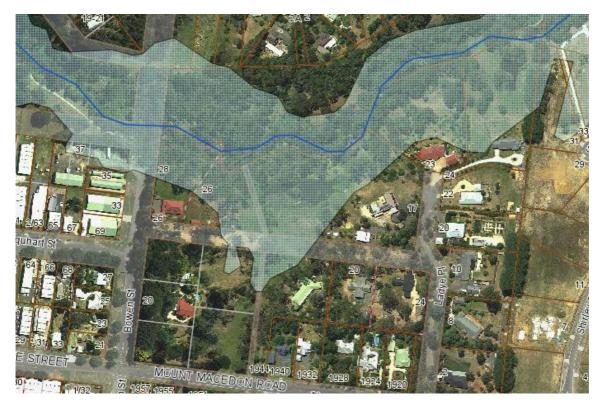


Figure 9: Land Subject to Inundation Overlay (LSIO)

Cultural Heritage

Browning Street is within an area of cultural heritage sensitivity as defined under the *Aboriginal Heritage Act 2006*. As a result, under the *Aboriginal Heritage Act 2006* and associated regulations, any significant ground disturbance to previously undisturbed land will trigger the requirement to prepare a Cultural Heritage Management Plan. Any artefacts or features of Aboriginal significance would be identified during preparation of the Cultural Heritage Management Plan.



Figure 10: Areas of cultural heritage sensitivity

Threats and issues

The threats to the site's environmental values include:

- Mowing and the dominant perennial grasses that limit recruitment opportunities for native species.
- Woody weeds competing with native shrubs and trees limiting seed germination. The woody weeds are Pines (*Pinus radiata*), willows (*Salix spp.*), a plum tree (*Prunus spp.*), Hawthorn (*Crataegus monogyna*), Blackberry (*rubus fruticosus aggregate*), Cape Broom (*Genista monspessulana* (*L.*)).
- Climber weeds such as ivy (*Hedera spp.*) climbing up the trunk of the trees and eventually choking the canopy tree.
- Herbaceous weeds such as the buttercup (*Ranunculus spp.*) dominating the creek line or wet areas.
- Construction of roads and culverts within tree protection zones.
- Open trench excavation for telecommunications.

Other issues for consideration include:

- Fencing limiting public access and blurring public and private land management
- Inappropriate storage of equipment and machinery.
- Maintenance of the north-south drainage line from Mount Macedon Road to Five Mile Creek.
- Maintaining security for adjoining land owners where there is no east-west fencing across the drainage line from Mount Macedon Road to Five Mile Creek.
- Access across the north-south drainage line from Mount Macedon Road to Five Mile Creek.
- Access across the drainage line along Bowen Street.
- Privacy for existing residents if public use of the reserve increases
- Inappropriate activities occurring in the reserve if it is secluded and lacks public surveillance
- Fire risk management
- Connecting any new Browning Street pathway to the existing footpath network, such as on Mt Macedon Road and along Five Mile Creek.



Figure 11: North-south drainage line running through the site from Five Mile Creek



Figure 12: View from Bowen Street showing raised mount and drainage line in the foreground and Colorbond fencing on the north west reserve boundary.

Community Consultation

The draft Browning Street Conservation Reserve Action Plan was released for public comment between 4 August and 1 September 2017. The consultation comprised:

- Direct mail to immediately adjoining and nearby land owners. Land owners were sent a copy of the draft Action Plan, a community feedback form and reply paid envelope.
- Signs at either end of the Browning Street Reserve.
- Information on Council's website

Altogether 14 feedback forms were received. Of these, three feedback forms were accompanied by longer supplementary submissions.

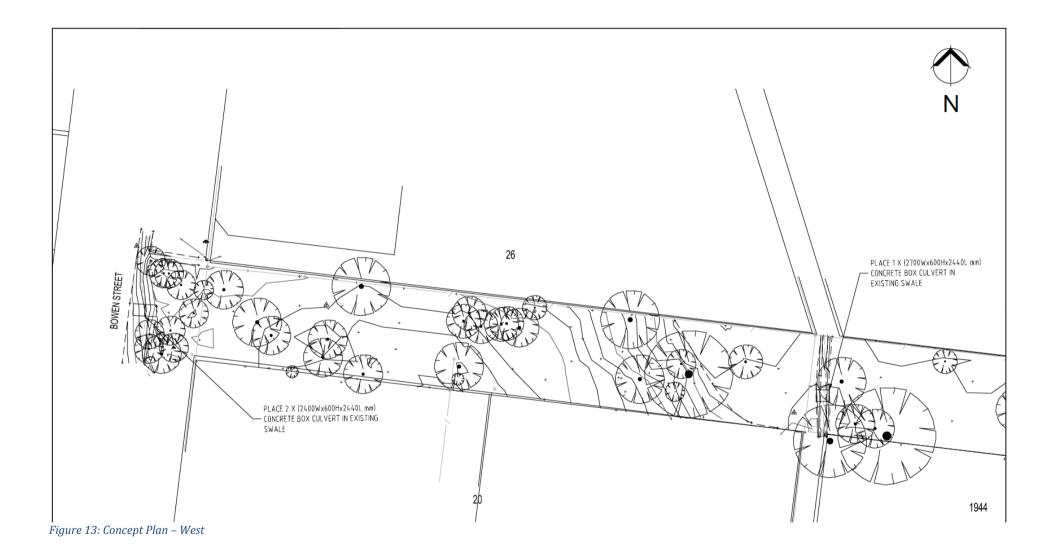
In their feedback the community indicated general support for the vision and actions included in the draft Plan, with the exemption of the following:

- Creation of a 1.2 metre wide crushed rock footpath that meanders through the reserve.
- Fencing the existing drainage line from Mount Macedon Road to Five Mile Creek if deemed necessary.
- Installation of interpretive signs about Black Gums at each end of the reserve.
- Commissioning of a Cultural Heritage Management Plan if required by the Aboriginal Heritage Act 2006.

The Action Plan was subsequently updated to reflect the feedback received.

Management Actions

Торіс	Action	Budget
Once off actions	Addon	Baagot
Internal fencing and other items	1. Removal of all internal fencing and other materials encroaching on Council land	N/A
Boundary fencing	2. Work with adjoining property owners to ensure fencing is installed along the length of the reserve's north and south parcel boundaries to correctly delineate the public and private land, including installation of east- west fencing across the Mount Macedon Road to Five Mile Creek drainage line to maintain security for adjoining properties. Ensure new fencing is open in style – e.g. post and wire or post and rail. Ensure implementation of this action is consistent with Council's Fencing Policy and Procedure 2016	TBC
Vehicle access and bollards	3. Place bollards on the Ladye Place end of the reserve to prevent vehicle access. Maintain existing vehicle access to 20 Browning Street and 17 Ladye Place.	\$1,500
Revegetation	 Prepare a revegetation plan. Replant with indigenous understorey species over three years to replace the grassy weeds. Take into account protection of privacy for adjoining property owners and potential overshadowing when preparing the plan. 	\$1,500
	 Plant outside the dripline of the trees. Work with Landcare and the local residents to undertake these plantings. 	
Pine trees	 Remove all pine trees within the reserve and on Bowen Street. 	\$2,500
Culvert	 Construct culverts over the open drain on Bowen Street and over the drainage line in the centre of the reserve to allow safe pedestrian access. 	\$2,500
Cultural Heritage Management Plan	8. Commission a Cultural Heritage Management Plan if required by the <i>Aboriginal Heritage Act 2006</i> .	As required
Annual, ongoing a	tions	
Woody and herbaceous weeds	 Undertake annual woody weed and herbaceous weed control. 	\$1,000 per year
Fire risk management	 Slash two to three times a year in spring and / or summer to reduce the fire risk. Avoid slashing areas targeted for regeneration or revegetation works. 	\$500 per year
Black Gum recruitment	11. Work with Landcare to investigate management of small patches to promote natural recruitment. This may include soil disturbance (e.g. raking) and localised weed removal.	N/A
Black Gum revegetation	12. Monitor the Black Gum recruitment. If no recruitment occurs in the first three years consider replanting.	N/A
Vehicle access	13. Do not allow further vehicular access to or along Browning Street.	N/A



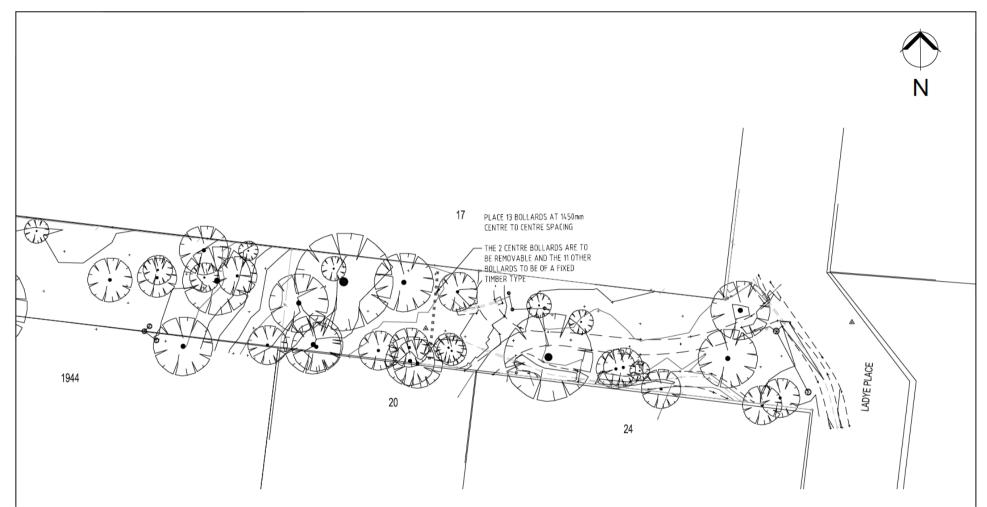


Figure 14: Concept Plan – East