## **Brilliant Barkers Creek Project**

- from Weed to Wonder

# 2014-2015





October 2015

The Brilliant Barkers Creek Project was organised by an informal network of three Landcare groups; Barkers Creek Landcare and Wildlife, Harcourt Valley Landcare and North Harcourt/Sedgwick Landcare. The project aimed to manage and enhance biodiversity values of Barkers Creek and tributaries. The project was funded by the Victorian Government Communities for Nature 2013 program supporting practical local action in the environment.

## **Brilliant Barkers Creek Steering Committee**

Daryl Colless – Barkers Creek Wildlife and Landcare Jarrod Coote – Harcourt Valley Landcare Karoline Klein – North Harcourt/Sedgwick Landcare

Report prepared for the Barkers Creek Landcare Network

by Janyce McMurtrie

of



## Brilliant Barkers Creek - from Weed to Wonder

#### 1 INTRODUCTION

The Brilliant Barkers Creek – from Weed to Wonder Project commenced on 1 May 2014. It aimed to manage and enhance biodiversity values of Barkers Creek and to support practical local action in the environment. The project was funded by the Victorian Government Communities for Nature 2013 program. It was organised by an informal network of three Landcare groups; Barkers Creek Landcare and Wildlife, Harcourt Valley Landcare and North Harcourt/Sedgwick Landcare. The Network is informally known as Barkers Creek Landcare Network.

Barkers Creek commences as a natural spring in the granitic hills of North Harcourt (figure 1) and flows south for 17km through Harcourt and Barkers Creek to Castlemaine. It then forms a confluence with Campbells Creek and Forest Creek. The creek has several tributaries including near Craigie Street and White Gum Road. The Creek has been rated as 21/50 or moderate Index of Stream Condition (ISC). The area contains a number of Ecological Vegetation Classes (EVCs) that are vulnerable depleted or endangered. Heathy Dry Forest, Box-Ironbark and Grassy Woodlands are prevalent.



Figure 1: Barkers Creek commences in the granite hills of North Harcourt

The two year Communities for Nature project aimed to manage and enhance biodiversity values of approximately 17km of Barkers Creek. The project continued the successful start made with the "Barkers Creek Clean-up" project; a collaboration between the Barkers Creek Landcare Network and Connecting Country that developed a Management Plan to guide creek restoration and created agreements with approximately 50 landholders.

The Brilliant Barkers Creek project was guided by the Barkers Creek Local Action Plan 2012. It aimed to target invasive weed species, remove pest animal habitat (figure 2), increase community ownership and awareness, improve productive land and preserve habitat and biodiversity. The key tasks included assessment and control of pest rabbits, assessment and control of Gorse, Blackberry and Broom, revegetation including planting tubestock and fencing to improve relevant EVCs and supporting community partnerships and education. In addition, the project included six community events over two years.



Figure 2: Blackberry harbouring rabbits along the creek.

Janyce McMurtrie of Regional Envirosense was engaged as the Project Manager to coordinate the project on a consultancy basis. The Project Manager was required to prepare a detailed works program, including outputs and milestones, engage and manage contractors, coordinate on-ground works, liaise with landholders and the project steering committee, manage the project budget and monitor progress.

The project budget was \$\$86,000. The completion date was 30 September 2015.

#### 2 PROJECT APPROACH

The Brilliant Barkers Creek project was guided by the Barkers Creek Local Action Plan 2012. The project was well received by the communities of Barkers Creek, Harcourt and North Harcourt. Initially, approaches were made to 108 landholders with Barkers Creek frontage from North Harcourt through to the Castlemaine Botanical Gardens. Communication via letters. email. Landcare local newsletters meetings and encouraged landholders to register their interest in the project.

The project offered landholders living adjacent to Barkers Creek and tributaries support to manage and enhance the biodiversity values of their creek frontage. In particular, it assisted with control of Gorse, Blackberry and Broom, fencing and revegetation with local plants. It also offered networking and information to help improve creek frontage properties.

A flexible approach encouraged many landholders to participate in the project. Landholders were offered flexible arrangements to participate in one or all elements of the project. Landholders contributed financially and/or with in-kind labour depending on the situation. This approach achieved high participation, effective budget management and maximum benefit to the creek and environmental restoration (refer to Table 2.1).

Table 2.1 – Project Targets

Actions	Target
Length of creek managed	
Landholder agreements signed	100 Ha
Weed control – Gorse Blackberry & Broom	100 Ha
Rabbit control	100 Ha
Fence construction	
Planting	7000
Volunteer hours	3750
Community Engagement	6

#### **Quick Facts**

Barkers Creek runs for approximately 17km from North Harcourt to Castlemaine.

Creek rating: moderate 21/50

Vegetation Types:

- EVC61 Box Ironbark
   Forest
- EVC72 Granitic Hills Woodland
- EVC81 Alluvial Terraces Woodland/ Creekline Mosaic

#### 3 Landcare groups:

- Barkers Creek Wildlife and Landcare,
- Harcourt Valley; and
- North Harcourt/Sedgwick

#### **Results**

11.2 km creek managed
40 Properties
324 Hectares
Weed control
1731 metres of fence
6,820 Plants
3340 volunteer hours
7 partnerships
6 events

#### 3 WORKS

The Brilliant Barkers Creek project aimed to target invasive weed species, remove pest animal habitat, increase community ownership and awareness, improve productive land and preserve habitat and biodiversity. The key tasks included control of pest rabbits and rabbit habitat, assessment and control of Gorse, Blackberry and Broom and revegetation including planting tubestock to improve relevant EVCs. Tubestock were staked and guarded to assist with establishment and fencing was constructed where necessary to protect revegetation from stock or rabbits.

A range of works was conducted in spring 2014, autumn 2015 and spring 2015. Works varied according to site conditions, issues, weed type and extent, and landholder preference. Some landholders required weed control, fencing, rabbit control and planting. Others required only one or two elements. Weed control methods included mechanical grooming, cut & paint, drill & fill and herbicide spray. Work was conducted by qualified and experienced contractors and where possible interested and able landholders completed all or part of the work themselves. Some landholders were supplied with chemical to control weeds or to manage regeneration following mechanical control.

	No of
Specific Actions	properties
Grooming Blackberry, Gorse and Broom	9
Cutting and Painting	6
Herbicide spray	11
Chemical supply	15
Rabbit control – Pindone bait stations	9
Fence construction	10
Ripping	3
Planting	31

Table 3.1 – Works summary



Figure 3: Stockproof fencing

Figure 4: Grooming

#### 4 BUDGET

The project team decided on a flexible approach to encourage many landholders to participate in the project. Landholders were offered flexible arrangements to participate in one or all elements of the project. Landholders contributed financially and/or with in-kind labour depending on the situation. Landholders contributed a percentage of the works cost depending on the number of works elements involved. For example, a landholder participating only in fencing contributed 50% of the cost of fence construction. Whereas, landholders participating in fencing, weed control and planting contributed 33% of works costs. The grant covered all project management costs. This approach achieved high participation, effective budget management and maximum benefit to the creek and environmental restoration (refer to Table 4.1).

Item	Exc. GST	GST	Total
Year 1 Budget	\$44,640.00	\$4,464.00	\$49,104.00
Year 2 Budget	\$33,640.00	\$3,364.00	\$37,004.00
Sub total	\$78,280.00	\$7,828.00	\$86,108.00
Income	\$20,665.09	\$2,066.51	\$22,731.60
Total	\$98,945.09	\$9,894.51	\$108,839.60

Table 4.1 – Project Budget

#### 5 <u>NETWORKING</u>

The project team approached and worked with a number of partners to coordinate works along Barkers Creek. Project partners included Barkers Creek Landcare & Wildlife, Harcourt Valley Landcare and North Harcourt/Sedgwick Landcare. The Department of Environment, Land, Water and Planning (DELWP) was very supportive. DELWP organised complementary weed control work on Crown land in Barkers Creek to support the commitment made by adjacent landholders. DELWP engaged Australian Mowing to spray weeds and cut & paint woody weeds along Barkers Creek between Merrifield Street and the Auto Wreckers.

The Mount Alexander Shire Council supported work on Council managed land in Harcourt Town Centre and has committed to ongoing maintenance of recent plantings adjacent to the creek. NCCMA and Connecting Country supported the project with advice and information. The Harcourt Progress Association has assisted with project communication.

#### 6 COMMUNITY ENGAGEMENT

The Brilliant Barkers Creek project aimed to conduct six community events over two years to engage the local community in the project. An additional aim was to raise awareness about the importance of healthy waterways. Six public events were organised. The Children's Planting Day and Picnic was held in the September school holidays 2014. This popular event attracted 35 children plus adults to enjoy a creek discovery activity, planting, games and picnic. The Taradale creek and habitat display was also very successful. Over thirty children participated in a "who lives near the creek activity", some returning three times. In addition to the events funded by the grant, a presentation was made to the Castlemaine Garden Club.

- Children's Planting Day & Picnic 23 September 2014
- Harcourt Applefest display & children's habitat activity 7 March 2015
- Castlemaine Garden Club presentation 26 May 2015
- Two Barkers Creek planting days 17 May and 21 June 2015
- Brew & Bake-off Sunday 16 August
- Taradale Children's creek habitat display and activity Saturday 17<sup>th</sup> October
- Final activity Brilliant Barkers Creek Bus Tour Sunday 29 November

#### Figure 5: Children's Planting Day & Picnic





Figure 6: Harcourt Applefest display & children's habitat activity

Figure 7: Castlemaine Garden Club presentation

## Introduction

- The Brilliant Barkers Creek Project is organised by 3 Landcare Groups.
- \* It is sponsored by a State Government Communities for Nature Grant.
- \* Aim: to manage and enhance biodiversity values of Barkers Creek.
- \* Key tasks include:
  - \* Rabbit control;
  - \* Control of Gorse, Blackberry and Broom;
  - Revegetation;
  - Supporting community partnerships and education; and
  - Protecting a number of Ecological Vegetation Classes (EVCs) that are vulnerable depleted or endangered.



### Figure 8: Barkers Creek planting days



Figure 9 - Brew & bake-off



Figure 10: Taradale Children's creek habitat display and activity



#### 7 PROJECT RESULTS

The Brilliant Barkers Creek project was well received by the communities of Barkers Creek, Harcourt and North Harcourt resulting in 40 landholders participating in the project. A variety of approaches, flexible financial options and the examples of previous and early work assisted to engage landholders with Barkers Creek frontage and form new contacts. The project successfully gained community ownership and raised awareness. The key tasks of controlling pest rabbits, removing rabbit habitat, controlling Gorse, Blackberry and Broom, and revegetating with locally sourced tubestock will lead to improved productive land and enriched habitat and biodiversity. The project successfully met all targets except for a slight shortfall in volunteer hours and exceeded many targets.

Actions	Number of properties	Target	Result
Length of creek managed	40		11.2 km
Landholder agreements signed	21	100 Ha	324 Ha
Weed control – Gorse Blackberry & Broom	30	100 Ha	269 Ha
Rabbit control	11	100 Ha	200 Ha
Fence construction	11		1731 lm
Planting	31	7000	6820 tubes
Volunteer hours (days)		3750 (75)	3340 (133)
Community Engagement		6	7
Publicity			4 "The Core" articles, 1 presentation

Table 7.1 – Project Results

#### 8 **PROJECT PHOTOGRAPHS**

#### Before

After





Ford Road, North Harcourt





Eagles Road, Harcourt





Harcourt Town Centre





Harcourt Skate Park





Picnic Gully Creek, Harcourt





Picnic Gully Creek, Harcourt





White Gum Road, Barkers Creek





White Gum Road, Barkers Creek





White Gum Road, Barkers Creek





White Gum Road, Barkers Creek





Lighthorse Road, Barkers Creek





Ryland Court, Castlemaine





#### Ryland Court, Castlemaine





Ryland Court, Castlemaine





Burnett Street, Castlemaine



Karingal Park Drive, Barkers Creek



Karingal Park Drive, Barkers Creek



Karingal Park Drive, Barkers Creek



Haques Road, Barkers Creek



Burnett Street, Castlemaine



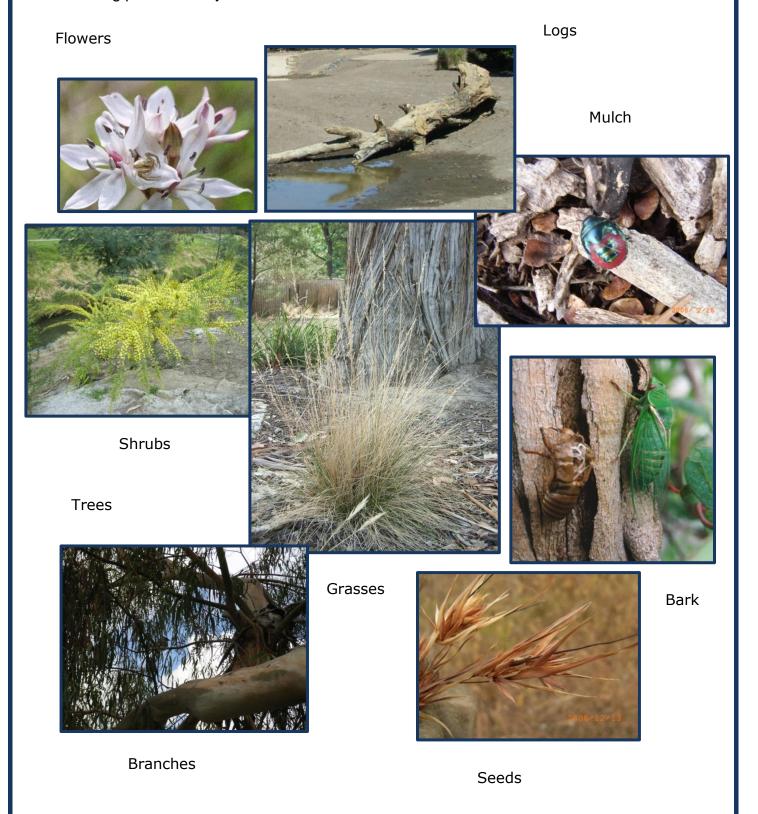




White Gum Road, Barkers Creek

#### 9 INTO THE FUTURE

The informal Barkers Creek Landcare network aims to continue to manage and enhance biodiversity values of Barkers Creek and tributaries. It plans to apply for future grants that support local communities to enhance and protect the environmental values of local waterways. It also plans to continue supporting landholders to work to improve their local areas. Long term aims are to improve the habitat value of Barkers Creek by increasing plant diversity.



Improving the quality of creek habitat will support a range of insects, birds, reptiles, amphibians and mammals to live in Barkers Creek, promoting a healthy ecosystem and ecosystem services.

