Spring Valley Road Loop Botanical Survey

Presented by Flowerdale Landcare

Photo: Steve Joblin

# Spring Valley Road Loop Botanical Survey

Spring, 2015

.

# Contents

#### Page 1 and 2.

#### SPRING VALLEY ROAD LOOP SURVEY REPORT

- · EVC's
- · Habitat Quality Assessment Overview
- · Tree Hollows
- Fauna
- Flora

Pages 3 to 6

#### HABITAT QUALITY ASSESSMENT WORKSHEETS

- · Old Spring Valley Road
- · Spring Valley Road

#### Pages 7 and 8

#### MAPS

- · EVC's and Tree Hollows
- · Satellite Image

#### Pages 9 to 12

#### PLANT SPECIES LIST

- · Spring Valley Road
- · Old Spring Valley Road

#### ACKNOWLEDGEMENT;

ALL PHOTOS SUPPLIED BY RICK WHEELER AND STEVE JOBLIN, FLOWERDALE LANDCARE GROUP, 2015



# Spring Valley Road Loop Survey Report.

The Loop was broken into two sections for surveying;

- 1. Old Spring Valley Road
- 2. Spring Valley Road

Both sections were surveyed twice, in early September and late October 2015.

# **Ecological Vegetation Classes (EVC's)**; Spring Valley Loop falls into the **Central Victorian Uplands Bioregion**.

There are 4 EVC's represented in the Spring Valley Loop;

- EVC 18 Riparian Forest (Vulnerable)
- EVC 22 Grassy Dry Forest (Depleted)
- EVC 23 Herb Rich Foothill Forest (Depleted)
- EVC 126 Swampy Riparian Complex (Endangered)

On entering the southern end of Spring Valley Road you will cross Break O'Day Creek passing through Riparian Forest. The road climbs through Herb Rich Foothill Forest and Grassy Dry Forest on the ridge. Continuing north and descending to the intersection with Old Spring Valley Road, you will pass through Swampy Riparian Complex. Old Spring Valley Road Climbs up again through Herb Rich Foothill Forest and Grassy Dry Forest and descends at the southern end through Herb Rich Foothill Forest.

### Habitat Quality Assessment;

Assessments were undertaken for Old Spring Valley Road and Spring Valley Road, with the worksheets included in this document. The habitat quality scored high with 16 and 14.5 out of 20. Connectivity in the Landscape, recruitment, understory and ground layer all scored high. The plant species list indicates good diversity.

### Tree Hollows;

A map was created and attached showing 2005 EVC's for Spring Valley Loop and noting with an 'x' trees that have hollows. The hollows are fairly evenly distributed in the Old Spring Valley Road section and sparser in the Spring Valley Road section. The hollows would cater to a variety of fauna, from Pardalotes through to Brush tailed Possums.

### Fauna;

Brush-tailed Phascogales have been seen on a property on Old Spring Valley Road. The Spotted Quail Thrush (listed as Near Threatened in Victoria) is observed occasionally at the high end of Old Spring Valley Road. Lyrebirds have been observed in the gullies that run off Spring Valley Road. Powerful Owls (listed as Threatened in Victoria) have used the area as part of their range. Koalas also move along the roadside vegetation to lower Spring Valley Road. A male Hooded Robin (listed as Threatened in Victoria) was photographed in 2011 a kilometre away, also on lower Spring Valley Road. A landholder in Spring Valley Road, 1km from the Loop, has kept records for nearly 2 decades and has recorded 107 native species of bird and 10 introduced species on that property.

## Flora;

The plant surveys show a diverse range of flora. One notable species is the Common Beard Heath *Leucopogon virgatus* (Conservation Status in Victoria listed as rare) located on the highest point of Old Spring Valley Road. Clover Glycine (*Glycine latrobeana*) listed as threatened in Victoria (Flora and Fauna Guarantee Act) also occurs on a property on Old Spring Valley Road.

Attention to the significance of the Spring Valley Road Loop was first drawn by the diversity and density of orchid and lily species that exist in a small pocket on the roadside in Spring Valley Road. The orchids were most noticeable post the 2009 bushfires. It is thought there may have been a germination response to the smoke cover and leaching into the soil.

At the time of the survey, the orchids were not flowering due to grazing by rabbits and deer which are in high numbers in the surrounding farmland and bush.



Leucopogon virgatus - Common Beard Heath

# Habitat Quality Assessment - Woodlands and Forests

	TARGET	QUALITY RANKING	WEIGHT	VALUE
LARGE		No large trees	0	19 j. j.
TREES (over 50cms) Apply to	10-15/ha in woodlands 20/ha in forests	Present but not common (Woodlands – up to 7/ha) (Forests – up to 12/ha)	1	2
living and dead		(Woodlands – more than 7/ha) (Forests – more than 12/ha)	2	
CANOPY COVER	10.20% action in	Very substantially reduced (<25% of target)	0	
(use all trees over 80% of	woodlands 20-50% cover in	Significantly reduced (25-50% of target)	0.5	
their mature height)	forests	Comparable to benchmark, although it may be reduced (>50% of target)	1	
		Absent or virtually so (<10% total expected cover)	0	
	Cover of native	Native cover greatly reduced (10-25% total expected cover)	2	4 - go.
UNDER- STOREY Include shrubs,	species – 90-100% in woodlands and	Native cover somewhat reduced, low diversity (25%-75% total expected cover, < 50% diversity)	3	5
grasses, herbs and young regenerating rrees	Diversity - 25-35 species in woodlands and forests.	Native cover somewhat reduced, <b>high</b> diversity (25% - 75% total expected cover, >50% diversity)	4	
	· · · ·	Native cover little reduced, high diversity (>75% total expected cover, >50% diversity)	5	
		Dominated by exotic species (>50% cover)	0	
	đ	Exotic species common but not dominant (25 - 50% cover)	1	
WEEDS 、	% cover	Exotic species present but not common $(5-25\% \text{ cover})$	2	
		Exotic species absent or very	1	1 .

rare

(<5% cover)

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AV	Include all	Recruitment absent or, if present then only for a minority of species (<30% of species)	0	
MENT	shrubs, grasses and herbs.	Recruitment common but not for all species (30-70%)	. 1	2
2 2		Common for most species (>70% of species)	2	4
ORGANIC	20% cover	Organic litter absent or significantly reduced from target (< 50%)	0	)
LITTER		Organic litter present and not significantly reduced from target (>50%)	1	
LOGS	۵.	Logs and/or cut stumps absent or significantly reduced from benchmark (< 25%)	0	
m/Ha (>10cm diameter)	100m in woodlands, 150m in forests	Logs and/or cut stumps common but reduced from benchmark (25 – 50%)	0.5	1
diameter)		Logs and/or cut stumps present and not significantly reduced from benchmark (>50%)	1	2
		< 2 ha	0	
SIZE	Area	2 – 10 ha	1	
		> 10 ha	2	
	Within 1 km radius,	< 10% cover	0	
ROURHOOD	% area covered by	10 – 60% cover	1	
BOURIOOD	vegetation	> 60% cover	2	
Distance to the nearest	'Core area' is a block of native	> 1 km from 'core area'	0	1 -
'core area'	vegetation > 50 Ha	< 1 km from 'core area'	1	1
			TOTAL	16

For Habitat Quality in EMG criteria: High – 12-20 Medium – 7-11.5 Low – 0-6.5

<u>4</u>

Habitat Qual	ty Assessment -	Woodlands	and Forests
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p)	TARGET	QUALITY RANKING	WEIGHT	VALUE
LARGE		No large trees	0	e <sup>6</sup>
TREES (over 50cms) Apply to	10-15/ha in woodlands	Present but not common (Woodlands – up to 7/ha) (Forests – up to 12/ha)	1	ີ ເ
living and dead	20/na in iorests	Common (Woodlands – more than 7/ha) (Forests – more than 12/ha)	2	
CANOPY	10.200/	Very substantially reduced (<25% of target)	0 ,	
(use all trees over 80% of	woodlands 20-50% cover in	Significantly reduced (25-50% of target)	0.5	
their mature height)	Comparable to benchmark, although it may be reduced (>50% of target)	1		
		Absent or virtually so (<10% total expected cover)	0	17
		Native cover greatly reduced (10-25% total expected cover)	2	
UNDER- STOREY Include shrubs,	Cover of native species – 90-100% in woodlands and	Native cover somewhat reduced, low diversity (25%-75% total expected cover, < 50% diversity)	3	
grasses, herbs and young regenerating trees	Diversity - 25-35 species in woodlands and forests	Native cover somewhat reduced, high diversity (25% - 75% total expected cover, >50% diversity)	4	5
		Native cover little reduced, high diversity (>75% total expected cover, >50% diversity)	5	, ,
н	, »	Dominated by exotic species (>50% cover)	0	e)
		Exotic species common but not dominant (25 – 50% cover)	1 .	
WEEDS	% cover	Exotic species present but not common (5-25% cover)	2	
		Exotic species absent or very rare (<5% cover)	3	

			TOTAL	14.5
the nearest 'core area'	block of native vegetation > 50 Ha	< 1 km from 'core area'	1	2
Distance to	'Core area' is a	> 1 km from 'core area'	0	ł
DOORIOOD	vegetation	> 60% cover	2	4
NEIGH- BOURHOOD	% area covered by	10 – 60% cover	1	
NEVOX	Within 1 km radius,	< 10% cover	0	
		> 10 ha	2	
SIZE	Area	2 – 10 ha	1	$\bigcirc$
		< 2 ha	0	
diameter)		Logs and/or cut stumps present and not significantly reduced from benchmark (>50%)	1	
m/Ha (>10cm	100m in woodlands, 150m in forests	Logs and/or cut stumps common but reduced from benchmark (25 – 50%)	0.5	0.5
LOGS		Logs and/or cut stumps absent or significantly reduced from benchmark (< 25%)	0	
LITTER		Organic litter present and not significantly reduced from target (>50%)	-1	
ORGANIC	20% cover	Organic litter absent or significantly reduced from target (< 50%)	0	)
		Common for most species (>70% of species)	2	* , * <b>.</b>
MENT	shrubs, grasses and herbs.	Recruitment common but not for all species (30-70%)	1	2
RECRIIIT	Include all	present then only for a minority of species (<30% of species)	0	0

For Habitat Quality in EMG criteria: High – 12-20 Medium – 7-11.5

Low - 0-6.5 \

<u>6</u>



**Biodiversity Interactive Map A4 Basic Landscape** 

(c) The State of Victoria Department of Environment, Land, Water & Planning 2015

Produced on 18 December 2015 14:33:40



## Spring Valley Loop Survey Results;

Survey 1. Conducted on the 2nd of September, 2015 Survey 2. Conducted on the 23rd of October, 2015 Area surveyed; Old Spring Valley Road section.

Colour code
2.9.15
23.10.15
species not seen

# Observations based on a flora survey in 2014 by King Parrot Creek Environment Group, now known as Flowerdale Landcare

Acacia dealbata	Silver Wattle	Dillwynia cinerascens	Parrot pea
Acacia implexa	lightwood	Diuris sulphurea	Tiger Orchid
Acacia mearnsii	black wattle	Drosera peltata	Tall Sundew
Acacia aculeatissima	Snake Wattle	Dichondra repens	kidney weed
Acacia melanoxylon	Blackwood	Drosera whittakeri	Scented Sundew
Acaena novae- zealandiae	Bidgee Widgee	Elymus scabrus	Common Wheat-grass
Acaena ovina	Australian Sheep's Burr	Eragrostis brownii	Common Love-grass
Acrotiche serrulata	Honey Pots	Eucalyptus dives	Broad leaf Peppermint
Amyema miquelii	Box Mistletoe	Eucalyptus globulus ssp. Bicostata	Eurabbie
Arthropodium strictum	Chocolate Lily	Eucalyptus goniocalyx	Long-leaf Box
Astroloma humifusum	Cranberry Heath	Eucalyptus macrorhyncha	Red Stringybark
Austrostipa spp	Spear-grass	Eucalyptus meliodora	Yellow Box
Baumia articulata	Jointed twig rush	Eucalyptus ovata	Swamp Gum
Bossiaea prostrata	Creeping Bossiaea	Eucalyptus rubida	Candlebark
Durung an in grupp trailig	Plue Dingushion	Eucaluptus radiata	Narrow leaf Pennermint
Brunonia australis	BILLE PHILCUSHION	Eucuryplus ruululu	
Bulbine bulbosa	Bulbine Lily	Euchiton sp	Cudweed
Bulbine bulbosa Burchardia umbellata	Bulbine Lily Milkmaids	Euchiton sp Exocarpus cupressiformis	Cudweed Cherry Ballart
Bulbine bulbosa Burchardia umbellata Caesia calliantha	Bulbine Lily Milkmaids Blue Grass Lily	Euchiton sp Exocarpus cupressiformis Gahnia sp	Cudweed Cherry Ballart Saw sedge
Bulbine bulbosa Burchardia umbellata Caesia calliantha Calochilus robertsonii	Bule Findshion Bulbine Lily Milkmaids Blue Grass Lily Purple bearded orchid	Euchiton sp Exocarpus cupressiformis Gahnia sp Geranium sp	Cudweed Cherry Ballart Saw sedge Cranes-bill
Bulbine bulbosa Burchardia umbellata Caesia calliantha Calochilus robertsonii Cassinia aculeata	Bule Findshion Bulbine Lily Milkmaids Blue Grass Lily Purple bearded orchid Common cassinia	Euchiton sp Exocarpus cupressiformis Gahnia sp Geranium sp Gonocarpus sp	Cudweed Cherry Ballart Saw sedge Cranes-bill Raspwort
Bulbine bulbosa Burchardia umbellata Caesia calliantha Calochilus robertsonii Cassinia aculeata Cassinia arcuata	Bule Pincusiion         Bulbine Lily         Milkmaids         Blue Grass Lily         Purple bearded orchid         Common cassinia         Drooping cassinia	Euchiton sp Exocarpus cupressiformis Gahnia sp Geranium sp Gonocarpus sp Hardenbergia violacea	Cudweed Cherry Ballart Saw sedge Cranes-bill Raspwort Purple Coral Pea
Bulbine bulbosa Burchardia umbellata Caesia calliantha Calochilus robertsonii Cassinia aculeata Cassinia arcuata	Bulle Pincusinon         Bulbine Lily         Milkmaids         Blue Grass Lily         Purple bearded orchid         Common cassinia         Drooping cassinia         Shiny cassinia	Euchiton sp Exocarpus cupressiformis Gahnia sp Geranium sp Gonocarpus sp Hardenbergia violacea Hovea linearis	Cudweed Cherry Ballart Saw sedge Cranes-bill Raspwort Purple Coral Pea Common Hovea
Bulbine bulbosa Burchardia umbellata Caesia calliantha Calochilus robertsonii Cassinia aculeata Cassinia arcuata Cassinia longifolia Danthonia spp	Bulbine Lily   Milkmaids   Blue Grass Lily   Purple bearded orchid   Common cassinia   Drooping cassinia   Shiny cassinia   Wallaby Grass	Euchiton sp Exocarpus cupressiformis Gahnia sp Geranium sp Gonocarpus sp Hardenbergia violacea Hovea linearis Hydrocotyle sp	Cudweed Cherry Ballart Saw sedge Cranes-bill Raspwort Purple Coral Pea Common Hovea Pennywort
Bulbine bulbosa Burchardia umbellata Caesia calliantha Calochilus robertsonii Cassinia aculeata Cassinia arcuata Cassinia longifolia Danthonia spp Daviesia leptophylla	Bulle PrincusitionBulbine LilyMilkmaidsBlue Grass LilyPurple bearded orchidCommon cassiniaDrooping cassiniaShiny cassiniaWallaby GrassNarrow-leaf Bitter-pea	Euchiton sp Euchiton sp Exocarpus cupressiformis Gahnia sp Geranium sp Gonocarpus sp Hardenbergia violacea Hovea linearis Hydrocotyle sp Hypoxis hygrometrica var, villosisepala	Cudweed Cherry Ballart Saw sedge Cranes-bill Raspwort Purple Coral Pea Common Hovea Pennywort Golden Star
Bulbine bulbosa Burchardia umbellata Caesia calliantha Calochilus robertsonii Cassinia aculeata Cassinia arcuata Cassinia longifolia Danthonia spp Daviesia leptophylla Dianella revoluta	Bulle PrincusinonBulbine LilyMilkmaidsBlue Grass LilyPurple bearded orchidCommon cassiniaDrooping cassiniaShiny cassiniaWallaby GrassNarrow-leaf Bitter-peaBlack anthered flax lily	Eucaiyptas radiata Euchiton sp Exocarpus cupressiformis Gahnia sp Geranium sp Gonocarpus sp Hardenbergia violacea Hovea linearis Hydrocotyle sp Hypoxis hygrometrica var, villosisepala	Narrow lear reppermintCudweedCherry BallartSaw sedgeCranes-billRaspwortPurple Coral PeaCommon HoveaPennywortGolden StarStar grass

Joycea pallida	Red-anther Wallaby Grass	Plantago varia	Variable Plantain
Juncus sp	Rush	Poa sp	Tussock Grass
Kunzea ericoides	Burgan	Poranthera microphylla	Small Poranthera
Lepidosperma sp	Sword-sedge	Pterostylis nutans	Nodding Greenhood
Hibbertia obtusifolia	grey guinea flower	Ranunculus lappaceus	Common Buttercup
Leucopogon virgatus	Common beard heath	Rubus parvifolius	Native raspberry
Lomandra longifolia	Spiny head mat-rush	Senecio (3 spp)	Fireweed/Groundsel
Lomandra filiformis	Wattle Mat-rush	Thelymitra sp	Sun-orchid
Luzula meridionalis	Woodrush	Themeda triandra	Kangaroo Grass
Melicytus dentatus	Tree Violet	Veronica gracilis	Slender Speedwell
Microlaena	weeping grass	Viola hederacea	native violet
Microtis sp	Onion-orchid	Wurmbea dioica	Early Nancy
Pimelea curviflora	Curved Rice-flower	Leptorhynchos squamatus	Scaly Buttons
Pimelea linifolia	Slender rice flower		

# A total of 66 species were identified on Old Spring Valley Road



*Eucalyptus dives -* Broad leaf Peppermint puts on a colourful show

# Spring Valley Road section of the Loop

Survey 1. Conducted on the 1st of September, 2015 Survey 2. Conducted on the 23rd of October, 2015

Colour Code	
1.9.15	
23.10.15	
species not seen	

Observations based on a flora survey in 2014 by King Parrot Creek Environment Group, now known as Flowerdale Landcare

Acacia dealbata	Silver Wattle	Drosera pelata	Tall Sundew
Acacia implexa	lightwood	Diuris sulphurea	Tiger Orchid
Acacia mearnsii	black wattle	Drosera whittakeri	Scented Sundew
Acacia melanoxylon	Blackwood	Elymus scabrus	Common Wheat-grass
Acaena novae-zelandiae	Bidgee Widgee	Eragrostis brownii	Common Love-grass
Acaena ovina	Australian Sheep's Burr	Eucalyptus dives	Broad leaf Peppermint
Acrotiche serrulata	Honey Pots	Eucalyptus globulus ssp. Bicostata	Eurabbie
Amyema miquelii	Box Mistletoe	Eucalyptus goniocalyx	Long-leaf Box
Arthropodium strictum	Chocolate Lily	Eucalyptus macrorhyncha	Red Stringybark
Asperula scoparia	Prickly Woodruff	Eucalyptus meliodora	Yellow Box
Astroloma humifusum	Cranberry Heath	Eucalyptus ovata	Swamp Gum
Austrostipa spp	Spear-grass	Eucalyptus radiata	Narrow leaf Peppermint
Bossiaea prostrata	Creeping Bossiaea	Euchiton sp	Cudweed
Brunonia australis	Blue Pincushion	Exocarpus cupressiformis	Cherry Ballart
Bulbine bulbosa	Bulbine Lily	Geranium sp	Cranes-bill
Burchardia umbellata	Milkmaids	Glycine clandestina	Twining Glycine
Caesia calliantha	Blue Grass Lily	Glycine tabacina	Variable glycine
Calochilus robertsonii	Purple bearded orchid	Gonocarpus sp	Raspwort
Cassinia aculeata	dogwood	Hardenbergia violacea	Purple Coral Pea
Danthonia spp	Wallaby Grass	Hibbertia obtusifolia	grey guinea flower
Daviesia leptophylla	Narrow-leaf Bitter-pea	Hovea linearis	Common Hovea
Dianella revoluta	Black anthered flax lily	Hydrocotyle sp	Pennywort
Dianella caerulea	Blue flax lily	Hypericum gramineum	Small St. John's Wort

Indigofera australis	Austral Indigo	Pimelea linifolia	Slender rice flower
Joycea pallida	Red-anther Wallaby Grass	Plantago varia	Variable Plantain
Juncus sp	Rush	Poa sp	Tussock Grass
Kunzea ericoides	Burgan	Poranthera microphylla	Small Poranthera
Lepidosperma sp	Sword-sedge	Pterostylis nutans	Nodding Greenhood
Lomandra filiformis	Wattle Mat-rush	Ranunculus lappaceus	Common Buttercup
Luzula meridionalis	Woodrush	Senecio (3 spp)	Fireweed/Groundsel
Melicytus dentatus	Tree Violet	Thelymitra sp	Sun-orchid
Microlaena	weeping grass	Themeda triandra	Kangaroo Grass
Microtis sp	Onion-orchid	Veronica gracilis	Slender Speedwell
Pimelea curviflora	Curved Rice-flower	Wurmbea dioica	Early Nancy

# A total of 61 species were identified in Spring Valley Road



Pterostylis nutans - Nodding Greenhood

Joycea pallida - Red Anther Wallaby Grass



Brunonia australis - Blue Pincushion