

Habitat Assessment Summary for Cathedral Lane

Cathedral Lane was surveyed for vegetation quality and species presence over the summer and autumn months 2016. The period has been exceedingly dry, and flowering lilies and orchids have largely been undetected during this timeframe. The vegetation quality is variable along the length of the road, and is often more associated with how neighbouring properties are managing their adjacent roadsides. Some areas show excessive clearing of fallen timber, planting of exotics, and mowing – reducing the habitat quality significantly. A number of the larger old trees were noted to be dead stags. There was minimal presence of woody weeds, and the proximity to the Cathedral Range State Park was of enormous value to the connection of habitat. Large old trees were identified and mapped – these trees had a circumference of 2.2 metres or more.

The survey has divided the road into 8 segments. These segments have been based on habitat quality changes, changes in slope and vegetation type. The dominant ecological vegetation class is Herb Rich Foothill Forest.

Zone 1, the first kilometre of Cathedral Lane was burnt in 2009. Most of the large trees were removed from the roadside, and the main vegetation remaining is regrowth, or dominated by pasture grasses.

Zone 2 has pasture grasses along the roadside, and shows a dominance of the drier Broad Leaf Peppermint tree. The habitat diversity is improving in this area with some small herbs, native grasses and climbers present.

Zone 3 is a riparian zone and incorporates Little River. It shows great diversity of shrub species, and has some fabulously big Manna Gums. This area is directly adjacent to the Park.

Zone 4 is largely pasture grasses, but with a wide swampy zone that is dominated by native sedges and rushes. Some native vegetation occurs around the swamp.

Zone 5 is Herb rich foothill forest and is showing an improvement in habitat quality with the presence of large old trees, good canopy cover, and a greater diversity in ground cover species. Weedy grass species are still present in this area.

Zone 6 abuts farmland and the pine plantation and is a narrow road reserve. It is mown, fallen timber has been removed, weedy grasses and shrubs are present, and the smaller ground covers, while present, are not dominating the ground layer. Many of the large old trees are dead.

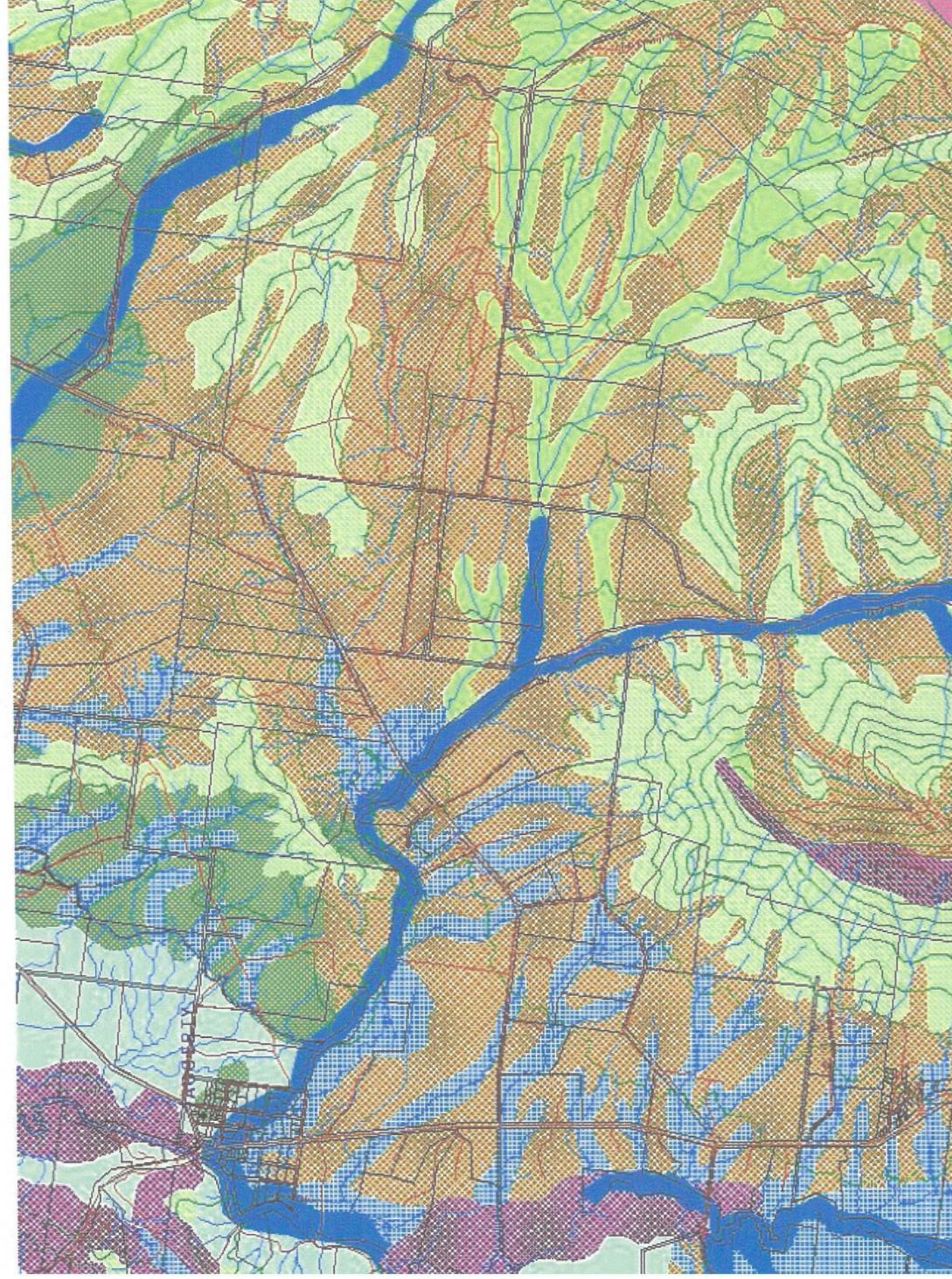
Zone 7 is a wide road reserve. It is only 400 metres long, but displays a great diversity of grasses, ground cover species, large old trees and good canopy cover. There are some pine seedlings in the reserve that I would recommend are a priority for removal. This area has great habitat value.

Zone 8 abuts farming land to the end of the laneway. The small ground cover species are less obvious, and introduced grasses are dominant. Most of the large old trees have been removed, and the canopy cover is reduced.

Rare or Threatened Flora

Rare or Threatened plants were not found during the survey. However, the conditions during the survey months were very dry, and herbaceous plants were minimal. It would be recommended surveying in Spring to detect the presence of rare or threatened herbs or grasses.

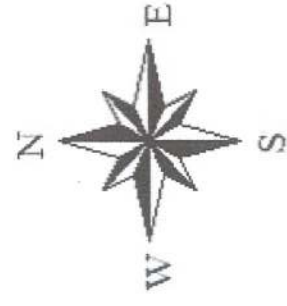
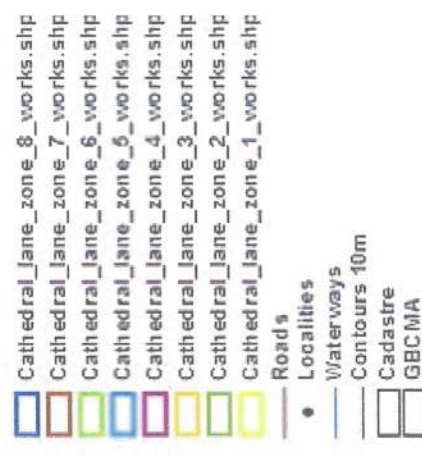
Cathedral Lane Ecological Vegetation Classes



Cathedral Range Vegetation Description Zones



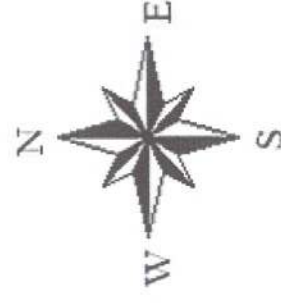
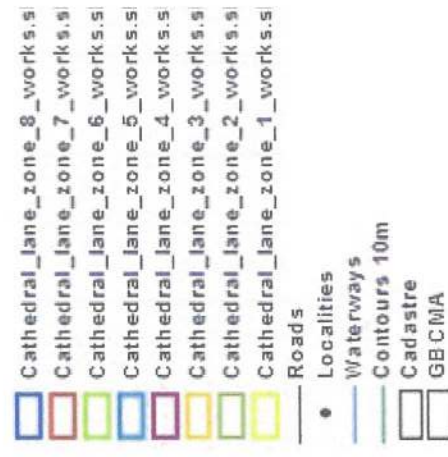
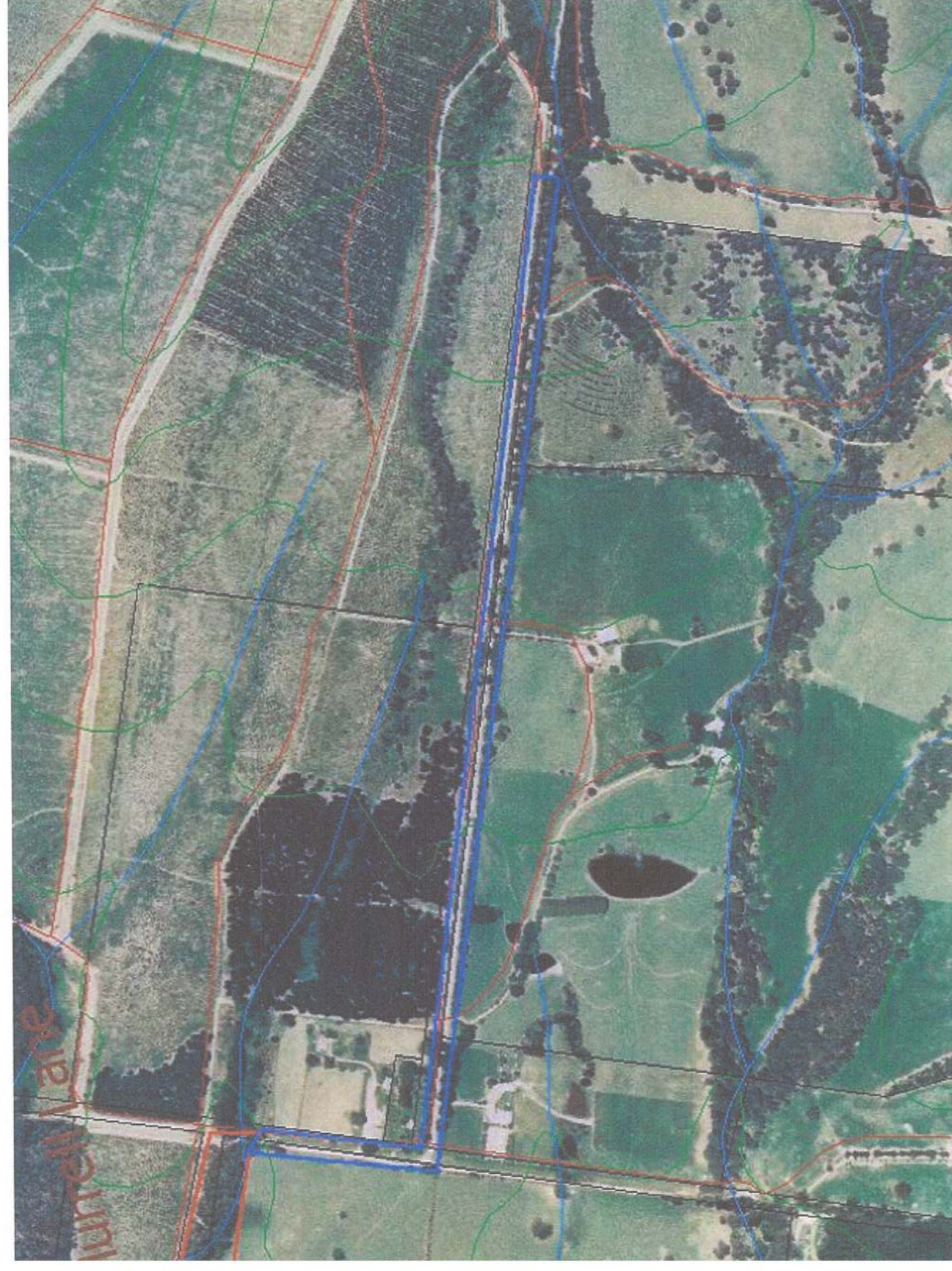
Cathedral Lane Vegetation Zones 1 - 4



Cathedral Lane Vegetation Zones 5 - 7



Cathedral Range Vegetation Zone 8



Zone 1

Zone 1 extends from Maroondah Hwy to 1.1 km along Cathedral Lane. This area was burnt during the 2009 fires, and most of the plants are regrowth saplings. The northern roadside is dominated by introduced pastures, and introduced grasses dominate the roadside verge.

Native Species

Botanical Name	Common Name
<i>Acacia dealbata</i>	Silver Wattle
<i>Acacia melanoxylon</i>	Blackwood Wattle
<i>Cassinia arcuata</i>	Chinese Tea Scrub
<i>Daviesia leptophylla</i>	Narrow leaved Bitter Pea
<i>Eucalyptus dives</i>	Broad leaf Peppermint
<i>Eucalyptus radiata</i>	Narrow leaved Peppermint
<i>Eucalyptus rubida</i>	Candlebark
<i>Exocarpus cupressiformis</i>	Wild Cherry
<i>Kunzea parvifolia</i>	Burgan
<i>Lomandra longifolia</i>	Spiny Headed Mat Rush
<i>Pteridium esculentum</i>	Bracken Fern
<i>Themeda triandra</i>	Kangaroo Grass

Introduced Species

Botanical Name	Common Name
<i>Dactylis glomeratus</i>	Cocksfoot
<i>Phalaris aquatica</i>	Phalaris
<i>Avena fatua</i>	Wild Oats
<i>Paspalum dilatatum</i>	Paspalum
<i>Hypochaeris radicata</i>	Cats Ears
<i>Cynodon dactylon</i>	Couch Grass
<i>Agrostis tenuis</i>	Bent Grass
<i>Bromus mollis</i>	Soft Brome

Zone 2

Zone 2 extends from 101 Cathedral Lane to 205 Cathedral Lane gate. The northern roadside is dominated by introduced pastures, and introduced grasses dominate the roadside verge. The southern roadside is increasing in diversity of species but still shows signs of past disturbance.

Native Species

Botanical Name	Common Name
<i>Acacia dealbata</i>	Silver Wattle
<i>Acacia melanoxylon</i>	Blackwood Wattle
<i>Acacia paradoxa</i>	Hedge Wattle
<i>Acrotriche serrulata</i>	Honey pots
<i>Billardiera scandens</i>	Apple Berry
<i>Cassinia arcuata</i>	Chinese Tea Scrub
<i>Dianella revoluta</i>	Spreading Flax Lily
<i>Eucalyptus dives</i>	Broad leaf Peppermint
<i>Eucalyptus rubida</i>	Candlebark
<i>Exocarpus cupressiformis</i>	Wild Cherry
<i>Hardenbergia violacea</i>	Purple Coral Pea
<i>Juncus sp.</i>	
<i>Kunzea parvifolia</i>	Burgan
<i>Lomandra filiformis</i>	Wattle Mat Rush
<i>Melicytus dentatus</i>	Tree Violet
<i>Microleana stipoides</i>	Weeping Grass
<i>Pteridium esculentum</i>	Bracken Fern
<i>Scenecio quadridentatus</i>	Cottony Fireweed
<i>Tricoryne elatior</i>	Yellow Rush Lily

Introduced Species

Botanical Name	Common Name
<i>Agrostis tenuis</i>	Bent Grass
<i>Avena fatua</i>	Wild Oats
<i>Briza maxima</i>	Quaking Grass
<i>Bromus mollis</i>	Soft Brome
<i>Hypochaeris radicata</i>	Cats Ears
<i>Rubus fruticosus</i>	Blackberry

ASSESSMENT OF HABITAT QUALITY – Self-assessment method

Site Score Sheet 7: Herb-rich WOODLANDS

Component & Benchmark	Observations	Quality Range	Score
LARGE TREES Defined as trunk diameter or circumference at breast height. Apply as: Diameter (220 cm) (Circumference) 70 cm	5/ha Number of large trees / ha (100m x 100m)	no large trees up to 7 LARGE TREES / ha more than 7 LARGE TREES / ha	0 1 2
CANOPY COVER Defined as the tallest stratum of native trees greater than 5m tall Herb-rich WOODLANDS 20% benchmark	% canopy cover 10% % cover / 20 x 100	less than 25% CANOPY COVER benchmark between 25 – 50% CANOPY COVER benchmark more than 50% CANOPY COVER benchmark	0 0.5 1
UNDERSTOREY (B) Tick appropriate boxes for PRESENCE of native vegetation (i.e. different life forms)	40% (A) % cover of native species	minimal COVER less than 10% low COVER between 10% – 25% reduced COVER between 25% – 75% AND less than 5 boxes ticked OR 5 or more boxes ticked adequate COVER more than 75% AND less than 5 boxes ticked OR 5 or more boxes ticked	0 2 3 4 4 5
Tree >5m Large herb >1m Grass/grasslike <1m Moss/lichen Shrub 1-5m Small herb <1m Fern Other Small shrub <1m Grass/grasslike >1m Scrambler/climber			
WEEDINESS	35 % weed cover	50% or more WEED COVER between 25% – 50% WEED COVER between 5% – 25% WEED COVER less than 5% WEED COVER	0 1 2 3
RECRUITMENT A woody species is considered to be recruiting when the number of immature plants (i.e. not flowering or fruiting) of an individual woody species is at least 10% of the total population of that species	(A) Number of woody species present 9 (B) Number of woody species recruiting 6 66% % recruitment = B/A x 100	less than 30% woody species RECRUITING between 30% – 70% woody species RECRUITING 70% or more woody species RECRUITING	0 1 2
ORGANIC LITTER Defined as small branches (less than 10cm diameter), twigs, leaves and other fallen or dead organic matter	5% % cover of organic litter	less than 5% ORGANIC LITTER more than 5% ORGANIC LITTER	0 1
LOGS Defined by length of stumps, fallen trees or branches at least 10 cm diameter (30 cm circumference)	Length of logs greater than 10 cm dia in 50m x 50m (i.e. 0.25 ha) Logs (m) x 4 (i.e. m/ha)	no logs less than 25m LOGS/ha more than 25m LOGS/ha	0 0.5 1
SIZE Defined by the size of the area being assessed AND any adjoining native vegetation		less than 2 ha between 2 – 10 ha more than 10 ha	0 1 2
NEIGHBOURHOOD Defined by the % area covered by native vegetation within 1 km of the site being assessed		less than 10% area covered between 10% – 50% area covered more than 50% area covered	0 1 2
CORE AREA Defined by the distance of the site being assessed from a block of native vegetation greater than 50ha		1 km or more from 50 ha block of native vegetation less than 1 km from 50 ha block of native vegetation	0 1

Zone 3

Zone 3 extends from 205 Cathedral Lane to the entrance to King Billy Retreat - .7km in total. Zone 3 encompasses the entrance to Cathedral Ranges State Park and the riparian vegetation around Little River. It is showing good diversity in both species range and structure.

Native Species

Botanical Name	Common Name
<i>Acacia dealbata</i>	Silver Wattle
<i>Acacia melanoxylon</i>	Blackwood Wattle
<i>Acacia paradoxa</i>	Hedge Wattle
<i>Blechnum nudum</i>	Fishbone Water Fern
<i>Cassinia arcuata</i>	Chinese Tea Scrub
<i>Clematis aristata</i>	Old Man's Beard
<i>Coprosma quadrifida</i>	Prickly Currant Bush
<i>Daviesia leptophylla</i>	Narrow leaved Bitter Pea
<i>Dianella revoluta</i>	Spreading Flax Lily
<i>Dianella tasmanica</i>	Tasman Flax Lily
<i>Dickinsonia antarctica</i>	Australian Tree Fern
<i>Eucalyptus dives</i>	Broad leaf Peppermint
<i>Eucalyptus radiata</i>	Narrow leaved Peppermint
<i>Eucalyptus rubida</i>	Candlebark
<i>Eucalyptus viminalis</i>	Manna Gum
<i>Exocarpus cupressiformis</i>	Wild Cherry
<i>Hardenbergia violacea</i>	Purple Coral Pea
<i>Kunzea parvifolia</i>	Burgan
<i>Melicytus dentatus</i>	Tree Violet
<i>Microleana stipoides</i>	Weeping Grass
<i>Pomaderris aspera</i>	Hazel Pomaderris
<i>Prostanthera lasianthos</i>	Victorian Christmas Bush
<i>Pteridium esculentum</i>	Bracken Fern
<i>Rubus parvifolius</i>	Native Raspberry
<i>Scenecio linearifolius</i>	Fireweed Groundsel

Introduced Species

Botanical Name	Common Name
	Fruit trees
<i>Acacia longifolia</i>	Sallow Wattle
<i>Agrostis tenuis</i>	Bent Grass
<i>Cirsium vulgare</i>	Spear Thistle
<i>Cytisus scoparius</i>	Broom
<i>Hypericum androsaemum</i>	Tutsan
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>Rubus fruticosus</i>	Blackberry
<i>Rumex acetosella</i>	Sheep Sorrel
<i>Solanum nigrum</i>	Blackberry Nightshade

ASSESSMENT OF HABITAT QUALITY – Self-assessment method

Site Score Sheet 15: Riparian FORESTS or WOODLANDS

Component & Benchmark	Observations	Quality Range	Score
LARGE TREES Defined as trunk diameter or circumference at breast height. Apply as: Diameter (Circumference) 80 cm (250 cm)	2 Number of large trees /ha (100m x 100m)	<i>no large trees</i> 0 <i>up to</i> 7 trees /ha in Riparian WOODLANDS 12 trees /ha in Riparian FORESTS 1 <i>more than</i> 7 trees /ha in WOODLANDS 12 trees /ha in FORESTS 2	2
CANOPY COVER Defined as the tallest stratum of native trees greater than 5m tall. Apply as: Riparian FORESTS 40% benchmark Riparian WOODLANDS 20% benchmark	% canopy cover 35 35/40 % cover/benchmark x 100	<i>less than</i> 25% CANOPY COVER benchmark 0 <i>between</i> 25 – 50% CANOPY COVER benchmark 0.5 <i>more than</i> 50% CANOPY COVER benchmark 1	1
UNDERSTOREY (B) Tick appropriate boxes for PRESENCE of native vegetation (i.e. different life forms)	75 (A) % cover of native species	<i>minimal</i> COVER <i>less than</i> 10% 0 <i>low</i> COVER <i>between</i> 10% – 25% 2 <i>reduced</i> COVER <i>between</i> 25% – 75% AND <i>less than</i> 4 boxes ticked for WOODLANDS <i>less than</i> 5 boxes ticked for FORESTS 3 OR 4 or <i>more</i> boxes ticked for WOODLANDS 5 or <i>more</i> boxes ticked for FORESTS 4 <i>adequate</i> COVER <i>more than</i> 75% AND <i>less than</i> 4 boxes ticked for WOODLANDS <i>less than</i> 5 boxes ticked for FORESTS 4 OR 4 or <i>more</i> boxes ticked for WOODLANDS 5 or <i>more</i> boxes ticked for FORESTS 5	5
WEEDINESS	20. % weed cover	50% <i>or more</i> WEED COVER 0 <i>between</i> 25% - 50% WEED COVER 1 <i>between</i> 5% - 25% WEED COVER 2 <i>less than</i> 5% WEED COVER 3	2
RECRUITMENT A woody species is considered to be recruiting when the number of immature plants (i.e. not flowering or fruiting) of an individual woody species is at least 10% of the total population of that species	(A) Number of woody species present 15 (B) Number of woody species recruiting 11. % recruitment = B/A x100	<i>less than</i> 30% woody species adequately RECRUITING 0 <i>between</i> 30% -70% woody species adequately RECRUITING 1 70% <i>or more</i> woody species adequately RECRUITING 2	1
ORGANIC LITTER Defined as small branches (less than 10cm diameter), twigs, leaves and other fallen or dead organic matter	5 % cover of organic litter	<i>less than</i> 10% ORGANIC LITTER in WOODLANDS 20% ORGANIC LITTER in FORESTS 0 <i>more than</i> 10% ORGANIC LITTER in WOODLANDS 20% ORGANIC LITTER in FORESTS 1	1
LOGS Defined by length of stumps, fallen trees or branches at least 10 cm diameter (or 30 cm circumference)	Length of logs greater than 10 cm dia. in 50m x 50m (i.e. 0.25 ha) Logs (m) x 4 (i.e. m/ha)	<i>no logs</i> 0 <i>less than</i> 50m LOGS/ha in WOODLANDS 100m LOGS/ha in FORESTS 0.5 <i>more than</i> 50m LOGS/ha in WOODLANDS 100m LOGS/ha in FORESTS 1	0
SIZE Defined by the size of the area being assessed AND any adjoining native vegetation		<i>less than</i> 2 ha 0 <i>between</i> 2 – 10 ha 1 <i>more than</i> 10 ha 2	2
NEIGHBOURHOOD Defined by the % area covered by native vegetation within 1 km of the site being assessed		<i>less than</i> 10% area covered 0 <i>between</i> 10% - 50% area covered 1 <i>more than</i> 50% area covered 2	1
CORE AREA Defined by the distance of the site being assessed from a block of native vegetation greater than 50ha		1 km <i>or more</i> from 50 ha block of native vegetation 0 <i>less than</i> 1 km from 50 ha block of native vegetation 1	1

Zone 4

Zone 4 extends from King Billy Retreat on the east side of Little River to 323 Cathedral Lane. This part of the roadside is mostly cleared, but has an interesting natural spring within the zone. Many of the plants around the spring are native rushes.

Native Species


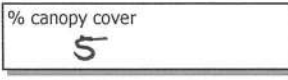

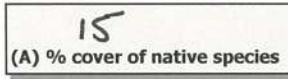
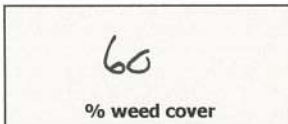
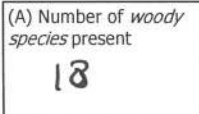
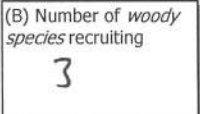

Botanical Name	Common Name
<i>Acacia dealbata</i>	Silver Wattle
<i>Acacia melanoxylon</i>	Blackwood Wattle
<i>Carex fascicularis</i>	Tassel Sedge
<i>Cyperus lucidus</i>	Umbrella Sedge
<i>Eucalyptus ovata</i>	Swamp Gum
<i>Eucalyptus radiata</i>	Narrow leaf Peppermint
<i>Eucalyptus rubida</i>	Candlebark
<i>Eucalyptus viminalis</i>	Manna Gum
<i>Juncus bufonius</i>	Toad Sedge
<i>Juncus sp.</i>	Three species noted
<i>Kunzea parvifolia</i>	Burgan
<i>Leptospermum continentale</i>	Prickly Tea Tree
<i>Leptospermum lanigerum</i>	Woolly Tea Tree
<i>Lomandra longifolia</i>	Spiny Headed Mat Rush
<i>Luzula meridionalis</i>	Woodrush
<i>Melicytus dentatus</i>	Tree Violet
<i>Microleana stipoides</i>	Weeping Grass
<i>Poa labillardiera</i>	Common Tussock Grass
<i>Pteridium esculentum</i>	Bracken Fern

Introduced Species

Botanical Name	Common Name
<i>Agrostis tenuis</i>	Bent Grass
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass
<i>Bromus mollis</i>	Soft Brome
<i>Cirsium vulgare</i>	Spear Thistle
<i>Cynodon dactylon</i>	Couch Grass
<i>Grevillea rosmarinifolia</i>	Rosemary Grevillea
<i>Hypochaeris radicata</i>	Cats Ears
<i>Phalaris aquatica</i>	Phalaris
<i>Plantago lanceolata</i>	Narrow leaf Plantain
<i>Rubus fruticosus</i>	Blackberry
<i>Rumex obtusifolius</i>	Broad leaf Dock
<i>Salix fragilis</i>	Willow
	Fruit tree species.

ASSESSMENT OF HABITAT QUALITY – Self-assessment method

Site Score Sheet 14: Riparian SCRUBS, Swampy SCRUBS or WOODLANDS

Component & Benchmark	Observations	Quality Range	Score
LARGE TREES Defined as trunk diameter or circumference at breast height. Apply only to Swampy WOODLANDS as: Diameter (Circumference) 70 cm (220 cm)	 Number of large trees / ha (100m x 100m)	<i>no large trees</i> <i>up to</i> 7 trees /ha in Swampy WOODLANDS <i>more than</i> 7 trees /ha in Swampy WOODLANDS	0 1 2
CANOPY COVER Defined as the tallest stratum of native trees greater than 5m tall. Apply as: Riparian SCRUBS 50% benchmark Swampy SCRUBS 50% benchmark Swampy WOODLANDS 20% benchmark	 % canopy cover  % cover/benchmark x 100	<i>less than</i> 25% CANOPY COVER benchmark <i>between</i> 25 – 50% CANOPY COVER benchmark <i>more than</i> 50% CANOPY COVER benchmark	0 0.5 1
UNDERSTOREY (B) Tick appropriate boxes for PRESENCE of native vegetation (i.e. different life forms)	 (A) % cover of native species	<i>minimal</i> COVER <i>less than</i> 10% <i>low</i> COVER <i>between</i> 10% – 25% <i>reduced</i> COVER <i>between</i> 25% - 75% AND <i>less than</i> 4 boxes ticked for WOODLANDS <i>less than</i> 5 boxes ticked for SCRUBS OR 4 or <i>more</i> boxes ticked for WOODLANDS 5 or <i>more</i> boxes ticked for SCRUBS <i>adequate</i> COVER <i>more than</i> 75% AND <i>less than</i> 4 boxes ticked for WOODLANDS <i>less than</i> 5 boxes ticked for SCRUBS OR 4 or <i>more</i> boxes ticked for WOODLANDS 5 or <i>more</i> boxes ticked for SCRUBS	0 2 3 4 4 5
WEEDINESS	 % weed cover	50% <i>or more</i> WEED COVER <i>between</i> 25% - 50% WEED COVER <i>between</i> 5% - 25% WEED COVER <i>less than</i> 5% WEED COVER	0 1 2 3
RECRUITMENT A woody species is considered to be recruiting when the number of immature plants (i.e. not flowering or fruiting) of an individual woody species is at least 10% of the total population of that species	(A) Number of woody species present  (B) Number of woody species recruiting  % recruitment = B/A x100	<i>less than</i> 30% woody species adequately RECRUITING <i>between</i> 30% -70% woody species adequately RECRUITING 70% <i>or more</i> woody species adequately RECRUITING	0 1 2
ORGANIC LITTER Defined as small branches (less than 10cm diameter), twigs, leaves and other fallen or dead organic matter	 % cover of organic litter	<i>less than</i> 10% ORGANIC LITTER <i>more than</i> 10% ORGANIC LITTER	0 1
LOGS Defined by length of stumps, fallen trees or branches at least 10 cm diameter (or 30 cm circumference) Only apply to Swampy WOODLANDS	Length of logs greater than 10 cm dia. in 50m x 50m (i.e. 0.25 ha) Logs (m) x 4 (i.e. m/ha)	<i>no logs</i> <i>less than</i> 25m LOGS/ha in Swampy WOODLANDS <i>more than</i> 25m LOGS/ha in Swampy WOODLANDS	0 0.5 1
SIZE Defined by the size of the area being assessed AND any adjoining native vegetation		<i>less than</i> 2 ha <i>between</i> 2 – 10 ha <i>more than</i> 10 ha	0 1 2
NEIGHBOURHOOD Defined by the % area covered by native vegetation within 1 km of the site being assessed		<i>less than</i> 10% area covered <i>between</i> 10% - 50% area covered <i>more than</i> 50% area covered	0 1 2
CORE AREA Defined by the distance of the site being assessed from a block of native vegetation greater than 50ha		<i>1 km or more</i> from 50 ha block of native vegetation <i>less than 1 km</i> from 50 ha block of native vegetation	0 1

Zone 5

Zone 5 extends from 323 Cathedral Lane to 410 Cathedral Lane. The ecological vegetation class is Herb Rich Foothill forest.

Native Species

Botanical Name	Common Name
	Mistletoe species
<i>Acacia dealbata</i>	Silver Wattle
<i>Acacia melanoxylon</i>	Blackwood Wattle
<i>Arthropodium strictum</i>	Chocolate Lily
<i>Daviesia leptophylla</i>	Narrow leaved Bitter Pea
<i>Dianella longifolia</i>	Pale Flax Lily
<i>Eucalyptus dives</i>	Broad leaf Peppermint
<i>Eucalyptus radiata</i>	Narrow leaf Peppermint
<i>Hibbertia obtusifolia</i>	Grey Guinea Flower
<i>Kunzea parvifolia</i>	Burgan
<i>Lomandra filiformis</i>	Wattle Mat Rush
<i>Melicytus dentatus</i>	Tree Violet
<i>Microleana stipoides</i>	Weeping Grass
<i>Poa ensiformis</i>	Purple -sheath Tussock Grass
<i>Rytidosperma pallida</i>	Red Anther Wallaby Grass
<i>Themeda triandra</i>	Kangaroo Grass
<i>Tricoryne elatior</i>	Yellow Rush Lily

Introduced Species

Botanical Name	Common Name
	Fruit Tree species
	Conifer species
<i>Agrostis tenuis</i>	Bent Grass
<i>Briza maxima</i>	Quaking Grass
<i>Bromus mollis</i>	Soft Brome
<i>Cynosurus echinatus</i>	Rough Dogs Tail
<i>Dactylis glomeratus</i>	Cocksfoot
<i>Hakea salicifolia</i>	Willow leaved Hakea
<i>Hedera helix</i>	English Ivy
<i>Hypochaeris radicata</i>	Cats Ears
<i>Pinus radiata</i>	Pine Tree

ASSESSMENT OF HABITAT QUALITY – Self-assessment method

Site Score Sheet 7: Herb-rich WOODLANDS

Component & Benchmark	Observations	Quality Range	Score
LARGE TREES Defined as trunk diameter or circumference at breast height. Apply as: Diameter (Circumference) 70 cm (220 cm)	12 / ha Number of large trees / ha (100m x 100m)	no large trees up to 7 LARGE TREES / ha more than 7 LARGE TREES / ha	0 1 2
CANOPY COVER Defined as the tallest stratum of native trees greater than 5m tall Herb-rich WOODLANDS 20% benchmark	% canopy cover 20 % % cover / 20 x 100	less than 25% CANOPY COVER benchmark between 25 – 50% CANOPY COVER benchmark more than 50% CANOPY COVER benchmark	0 0.5 1
UNDERSTOREY (B) Tick appropriate boxes for PRESENCE of native vegetation (i.e. different life forms)	60 (A) % cover of native species Tree >5m <input checked="" type="checkbox"/> Large herb >1m <input checked="" type="checkbox"/> Grass/grasslike <1m <input checked="" type="checkbox"/> Moss/lichen <input checked="" type="checkbox"/> Shrub 1-5m <input checked="" type="checkbox"/> Small herb <1m <input checked="" type="checkbox"/> Fern <input type="checkbox"/> Other <input type="checkbox"/> Small shrub <1m <input checked="" type="checkbox"/> Grass/grasslike >1m <input type="checkbox"/> Scrambler/climber <input type="checkbox"/>	minimal COVER less than 10% low COVER between 10% – 25% reduced COVER between 25% – 75% AND less than 5 boxes ticked OR 5 or more boxes ticked adequate COVER more than 75% AND less than 5 boxes ticked OR 5 or more boxes ticked	0 2 3 4 4 5
WEEDINESS	40 % weed cover	50% or more WEED COVER between 25% – 50% WEED COVER between 5% – 25% WEED COVER less than 5% WEED COVER	0 1 2 3
RECRUITMENT A woody species is considered to be recruiting when the number of immature plants (i.e. not flowering or fruiting) of an individual woody species is at least 10% of the total population of that species	(A) Number of woody species present (B) Number of woody species recruiting % recruitment = B/A x 100	less than 30% woody species RECRUITING between 30% – 70% woody species RECRUITING 70% or more woody species RECRUITING	0 1 2
ORGANIC LITTER Defined as small branches (less than 10cm diameter), twigs, leaves and other fallen or dead organic matter	% cover of organic litter	less than 5% ORGANIC LITTER more than 5% ORGANIC LITTER	0 1
LOGS Defined by length of stumps, fallen trees or branches at least 10 cm diameter (30 cm circumference)	Length of logs greater than 10 cm dia in 50m x 50m (i.e. 0.25 ha) Logs (m) x 4 (i.e. m/ha)	no logs less than 25m LOGS/ha more than 25m LOGS/ha	0 0.5 1
SIZE Defined by the size of the area being assessed AND any adjoining native vegetation		less than 2 ha between 2 – 10 ha more than 10 ha	0 1 2
NEIGHBOURHOOD Defined by the % area covered by native vegetation within 1 km of the site being assessed		less than 10% area covered between 10% – 50% area covered more than 50% area covered	0 1 2
CORE AREA Defined by the distance of the site being assessed from a block of native vegetation greater than 50ha		1 km or more from 50 ha block of native vegetation less than 1 km from 50 ha block of native vegetation	0 1

Zone 6

Zone 6 extends from 410 Cathedral Lane to Cathedral Farm - .8km. The ecological vegetation class is Herb Rich Foothill forest.

Native Species

Botanical Name	Common Name
<i>Acacia dealbata</i>	Silver Wattle
<i>Acacia melanoxylon</i>	Blackwood Wattle
<i>Acrotriche serrulata</i>	Honey pots
<i>Arthropodium strictum</i>	Chocolate Lily
<i>Billardiera scandens</i>	Apple Berry
<i>Bossiaea prostrata</i>	Creeping Bossiaea
<i>Cassinia aculeata</i>	Common Cassinia, Dogwood
<i>Daviesia leptophylla</i>	Narrow leaved Bitter Pea
<i>Dianella revoluta</i>	Spreading Flax Lily
<i>Eucalyptus macrorhyncha</i>	Red Stringybark
<i>Eucalyptus radiata</i>	Narrow leaf Peppermint
<i>Eucalyptus rubida</i>	Candlebark
<i>Exocarpus cupressiformis</i>	Wild Cherry, Cherry Ballart
<i>Gonocarpus tetragynus</i>	Common Raspwort
<i>Hardenbergia violacea</i>	Purple Coral Pea
<i>Hibbertia obtusifolia</i>	Grey Guinea Flower
<i>Indigofera australis</i>	Austral Indigo
<i>Kunzea parvifolia</i>	Burgan
<i>Lomandra filiformis</i>	Wattle Mat Rush
<i>Melicytus dentatus</i>	Tree Violet
<i>Microleana stipoides</i>	Weeping Grass
<i>Pteridium esculentum</i>	Bracken Fern
<i>Rubus parvifolius</i>	Native Raspberry

Introduced Species

Botanical Name	Common Name
	Fruit Tree species
	Grevillea species
<i>Acacia longifolia</i>	Sallow Wattle
<i>Agrostis tenuis</i>	Bent Grass
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass
<i>Briza maxima</i>	Quaking Grass
<i>Cytisus scoparius</i>	English Broom
<i>Hakea salicifolia</i>	Willow leaved Hakea
<i>Hedera helix</i>	English Ivy
<i>Hypochaeris radicata</i>	Cats Ears
<i>Oxalis cernua</i>	Sour sob
<i>Pinus radiata</i>	Pine Tree
<i>Robinia pseudoacacia</i>	Robinia
<i>Rubus fruticosus</i>	Blackberry
<i>Watsonia meriana</i> var. <i>bulbillifera</i>	Bulbil Watsonia, (sprayed)

ASSESSMENT OF HABITAT QUALITY – Self-assessment method

Site Score Sheet 7: Herb-rich WOODLANDS

Component & Benchmark	Observations	Quality Range	Score
LARGE TREES Defined as trunk diameter or circumference at breast height. Apply as: Diameter (70 cm) (Circumference) (220 cm)	12 Number of large trees / ha (100m x 100m)	no large trees up to 7 LARGE TREES / ha more than 7 LARGE TREES / ha	0 1 2
CANOPY COVER Defined as the tallest stratum of native trees greater than 5m tall Herb-rich WOODLANDS 20% benchmark	% canopy cover 10% % cover / 20 x 100	less than 25% CANOPY COVER benchmark between 25 – 50% CANOPY COVER benchmark more than 50% CANOPY COVER benchmark	0 0.5 1
UNDERSTOREY (B) Tick appropriate boxes for PRESENCE of native vegetation (i.e. different life forms)	50% (A) % cover of native species	minimal COVER less than 10% low COVER between 10% – 25% reduced COVER between 25% – 75% AND less than 5 boxes ticked OR 5 or more boxes ticked adequate COVER more than 75% AND less than 5 boxes ticked OR 5 or more boxes ticked	0 2 3 4 4 5
Tree >5m Large herb >1m Grass/grasslike <1m Moss/lichen Shrub 1-5m Small herb <1m Fern Other Small shrub <1m Grass/grasslike >1m Scrambler/climber			
WEEDINESS	50 % weed cover	50% or more WEED COVER between 25% – 50% WEED COVER between 5% – 25% WEED COVER less than 5% WEED COVER	0 1 2 3
RECRUITMENT A woody species is considered to be recruiting when the number of immature plants (i.e. not flowering or fruiting) of an individual woody species is at least 10% of the total population of that species	(A) Number of woody species present 8 (B) Number of woody species recruiting 3 % recruitment = B/A x 100	less than 30% woody species RECRUITING between 30% – 70% woody species RECRUITING 70% or more woody species RECRUITING	0 1 2
ORGANIC LITTER Defined as small branches (less than 10cm diameter), twigs, leaves and other fallen or dead organic matter	0 % cover of organic litter	less than 5% ORGANIC LITTER more than 5% ORGANIC LITTER	0 1
LOGS Defined by length of stumps, fallen trees or branches at least 10 cm diameter (30 cm circumference)	Length of logs greater than 10 cm dia in 50m x 50m (i.e. 0.25 ha) 0 Logs (m) x 4 (i.e. m/ha)	no logs less than 25m LOGS/ha more than 25m LOGS/ha	0 0.5 1
SIZE Defined by the size of the area being assessed AND any adjoining native vegetation		less than 2 ha between 2 – 10 ha more than 10 ha	0 1 2
NEIGHBOURHOOD Defined by the % area covered by native vegetation within 1 km of the site being assessed		less than 10% area covered between 10% – 50% area covered more than 50% area covered	0 1 2
CORE AREA Defined by the distance of the site being assessed from a block of native vegetation greater than 50ha		1 km or more from 50 ha block of native vegetation less than 1 km from 50 ha block of native vegetation	0 1

Zone 7

Zone 7 is .4km long and begins at Cathedral Valley Farm. It shows great plant diversity and structure with minimal weed species. There are signs of deer browsing, and pines have escaped from the adjacent pine plantation. The Pines and Sallow Wattle are a priority to control. The ecological vegetation class is Herb Rich Foothill forest.

Native Species

Botanical Name	Common Name
<i>Acacia dealbata</i>	Silver Wattle
<i>Acacia melanoxylon</i>	Blackwood Wattle
<i>Acaena novae-zelandiae</i>	Bidgee Widgee
<i>Acrotriche serrulata</i>	Honey pots
<i>Arthropodium strictum</i>	Chocolate Lily
<i>Billardiera scandens</i>	Apple Berry
<i>Cassinia aculeata</i>	Common Cassinia, Dogwood
<i>Cassinia arcuata</i>	Chinese Tea Scrub
<i>Coprosma quadrifida</i>	Prickly Currant Bush
<i>Daviesia leptophylla</i>	Narrow leaved Bitter Pea
<i>Dianella revoluta</i>	Spreading Flax Lily
<i>Epacris impressa</i>	Common Heath
<i>Eucalyptus radiata</i>	Narrow leaf Peppermint
<i>Exocarpus cupressiformis</i>	Wild Cherry, Cherry Ballart
<i>Gonocarpus tetragynus</i>	Common Raspwort
<i>Hibbertia obtusifolia</i>	Grey Guinea Flower
<i>Hovea linearifolia</i>	Common Hovea
<i>Hypericum gramineum</i>	Small St Johns Wort
<i>Indigofera australis</i>	Austral Indigo
<i>Kunzea parvifolia</i>	Burgan
<i>Lomandra filiformis</i>	Wattle Mat Rush
<i>Lomandra longifolia</i>	Spiny Headed Mat Rush
<i>Melicytus dentatus</i>	Tree Violet
<i>Microleana stipoides</i>	Weeping Grass
<i>Platylobium formosum</i>	Handsome Flat Pea
<i>Pteridium esculentum</i>	Bracken Fern
<i>Rytidosperma pallida</i>	Red Anther Wallaby Grass
<i>Rytidosperma sp.</i>	Wallaby Grass sp.
<i>Tricoryne elatior</i>	Yellow Rush Lily

Introduced Species

Botanical Name	Common Name
	Fruit Tree species
<i>Acacia longifolia</i>	Sallow Wattle
<i>Agrostis tenuis</i>	Bent Grass
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass
<i>Briza maxima</i>	Quaking Grass

ASSESSMENT OF HABITAT QUALITY – Self-assessment method

Site Score Sheet 7: Herb-rich WOODLANDS

Component & Benchmark	Observations	Quality Range	Score
LARGE TREES Defined as trunk diameter or circumference at breast height. Apply as: Diameter (Circumference) 70 cm (220 cm)	15 Number of large trees / ha (100m x 100m)	no large trees up to 7 LARGE TREES /ha more than 7 LARGE TREES /ha	0 1 2
CANOPY COVER Defined as the tallest stratum of native trees greater than 5m tall Herb-rich WOODLANDS 20% benchmark	% canopy cover 20 % cover/20 x 100	less than 25% CANOPY COVER benchmark between 25 – 50% CANOPY COVER benchmark more than 50% CANOPY COVER benchmark	0 0.5 1
UNDERSTOREY (B) Tick appropriate boxes for PRESENCE of native vegetation (i.e. different life forms)	90 (A) % cover of native species	minimal COVER less than 10% low COVER between 10% – 25% reduced COVER between 25% – 75% AND less than 5 boxes ticked OR 5 or more boxes ticked adequate COVER more than 75% AND less than 5 boxes ticked OR 5 or more boxes ticked	0 2 3 4 4 5
Tree >5m <input checked="" type="checkbox"/> Large herb >1m <input type="checkbox"/> Grass/grasslike <1m <input checked="" type="checkbox"/> Moss/lichen <input checked="" type="checkbox"/> Shrub 1-5m <input checked="" type="checkbox"/> Small herb <1m <input checked="" type="checkbox"/> Fern <input type="checkbox"/> Other <input type="checkbox"/> Small shrub <1m <input checked="" type="checkbox"/> Grass/grasslike >1m <input checked="" type="checkbox"/> Scrambler/climber <input checked="" type="checkbox"/>			5
WEEDINESS	5 % weed cover	50% or more WEED COVER between 25% – 50% WEED COVER between 5% – 25% WEED COVER less than 5% WEED COVER	0 1 2 3
RECRUITMENT A woody species is considered to be recruiting when the number of immature plants (i.e. not flowering or fruiting) of an individual woody species is at least 10% of the total population of that species	(A) Number of woody species present (B) Number of woody species recruiting % recruitment = B/A x100	less than 30% woody species RECRUITING between 30% -70% woody species RECRUITING 70% or more woody species RECRUITING	0 1 2
ORGANIC LITTER Defined as small branches (less than 10cm diameter), twigs, leaves and other fallen or dead organic matter	5 % cover of organic litter	less than 5% ORGANIC LITTER more than 5% ORGANIC LITTER	0 1
LOGS Defined by length of stumps, fallen trees or branches at least 10 cm diameter (30 cm circumference)	Length of logs greater than 10 cm dia in 50m x50m (i.e. 0.25 ha) Logs (m) x 4 (i.e. m/ha)	no logs less than 25m LOGS/ha more than 25m LOGS/ha	0 0.5 1
SIZE Defined by the size of the area being assessed AND any adjoining native vegetation		less than 2 ha between 2 – 10 ha more than 10 ha	0 1 2
NEIGHBOURHOOD Defined by the % area covered by native vegetation within 1 km of the site being assessed		less than 10% area covered between 10% – 50% area covered more than 50% area covered	0 1 2
CORE AREA Defined by the distance of the site being assessed from a block of native vegetation greater than 50ha		1 km or more from 50 ha block of native vegetation less than 1 km from 50 ha block of native vegetation	0 1

Zone 8

Zone 8 extends to the entrance of 'Mala Skala' at the end of Cathedral Lane – 1.4km. It is bordered on the north by a pine plantation and has open farmland on the southern side with a narrow roadside. The ecological vegetation class is Herb Rich Foothill forest.

Native Species

Botanical Name	Common Name
<i>Acacia dealbata</i>	Silver Wattle
<i>Acacia melanoxylon</i>	Blackwood Wattle
<i>Acacia verniciflua</i>	Varnish Wattle
<i>Billardiera scandens</i>	Apple Berry
<i>Bursaria spinosa</i>	Sweet Bursaria
<i>Cassinia aculeata</i>	Common Cassinia, Dogwood
<i>Cassinia arcuata</i>	Chinese Tea Scrub
<i>Clematis aristata</i>	Old Mans Beard
<i>Coprosma quadrifida</i>	Prickly Currant Bush
<i>Eucalyptus macrorhyncha</i>	Red Stringybark
<i>Eucalyptus radiata</i>	Narrow leaf Peppermint
<i>Eucalyptus rubida</i>	Candlebark
<i>Exocarpus cupressiformis</i>	Wild Cherry, Cherry Ballart
<i>Gahnia radula</i>	Thatch Saw Sedge
<i>Kunzea parvifolia</i>	Burgan
<i>Lomandra longifolia</i>	Spiny Headed Mat Rush
<i>Microleana stipoides</i>	Weeping Grass
<i>Pteridium esculentum</i>	Bracken Fern
<i>Rubus parvifolius</i>	Native Raspberry
<i>Scenecio quadridentatus</i>	Cottony Fireweed
<i>Themeda triandra</i>	Kangaroo Grass

Introduced Species

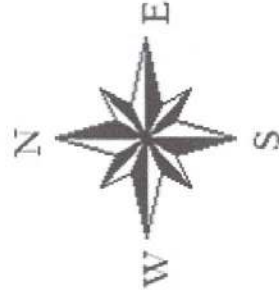
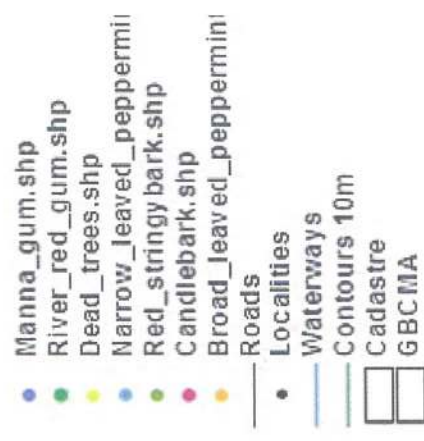
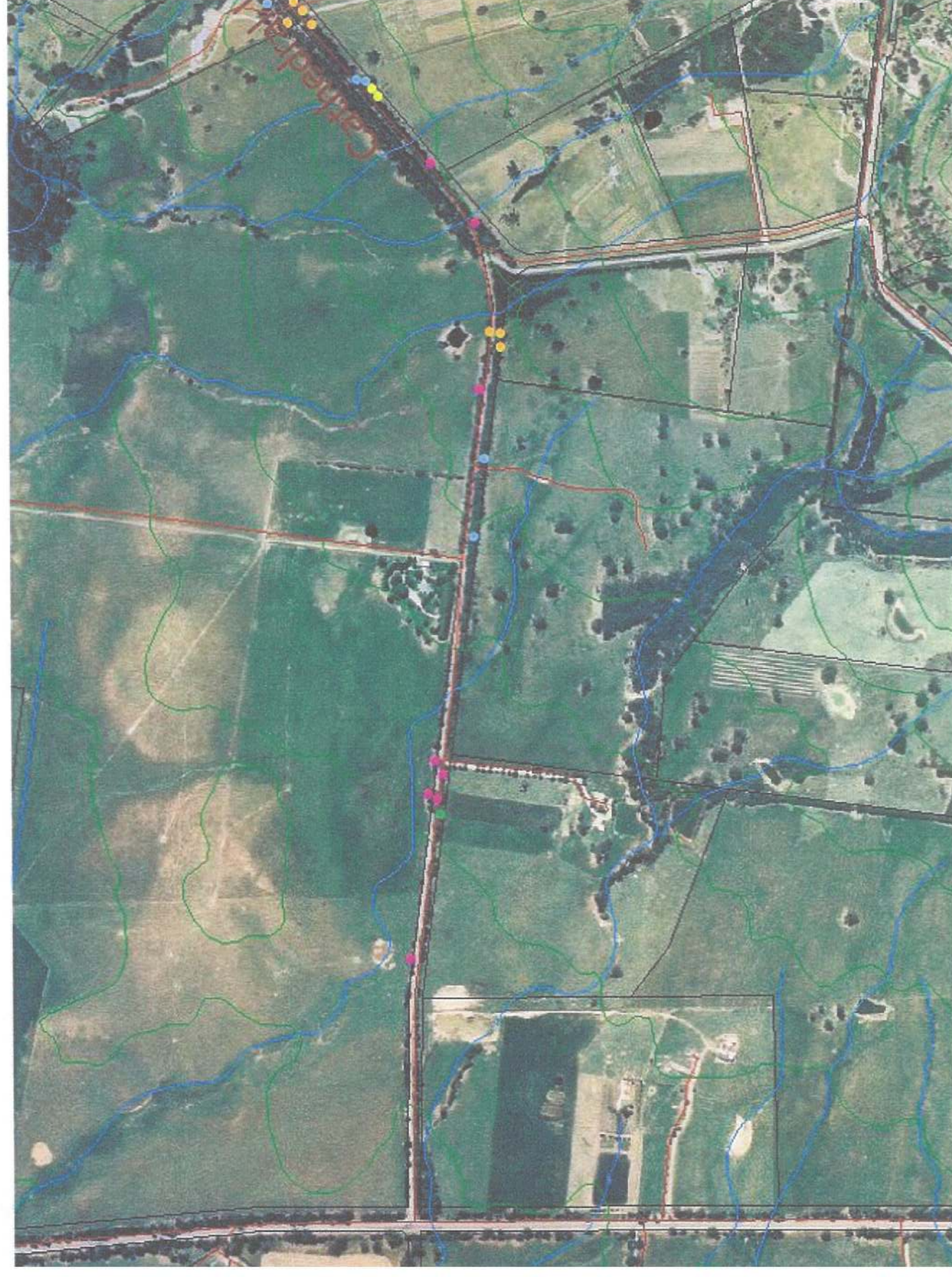
Botanical Name	Common Name
<i>Acetosella vulgaris</i>	Sheep Sorrel
<i>Agapanthus species</i>	
<i>Agrostis tenuis</i>	Bent Grass
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass
<i>Briza maxima</i>	Quaking Grass
<i>Bromus mollis</i>	Soft Brome
<i>Callistemon species</i>	
<i>Cirsium vulgare</i>	Spear Thistle
<i>Conifer species</i>	
<i>Cynosurus echinatus</i>	Rough Dogs Tail
<i>Hypochaeris radicata</i>	Cats Ears
<i>Melaleuca decussata</i>	Totem Poles
<i>Oxalis pes-caprae</i>	Soursob
<i>Pinus radiata</i>	Pine Tree

ASSESSMENT OF HABITAT QUALITY – Self-assessment method

Site Score Sheet 7: Herb-rich WOODLANDS

Component & Benchmark	Observations	Quality Range	Score
LARGE TREES Defined as trunk diameter or circumference at breast height. Apply as: Diameter (70 cm) (Circumference) (220 cm)	5/ha Number of large trees / ha (100m x 100m)	no large trees	0
		up to 7 LARGE TREES / ha	1
		more than 7 LARGE TREES / ha	2
CANOPY COVER Defined as the tallest stratum of native trees greater than 5m tall Herb-rich WOODLANDS 20% benchmark	% canopy cover 8% % cover / 20 x 100	less than 25% CANOPY COVER benchmark	0
		between 25 – 50% CANOPY COVER benchmark	0.5
		more than 50% CANOPY COVER benchmark	1
UNDERSTOREY (B) Tick appropriate boxes for PRESENCE of native vegetation (i.e. different life forms)	25 (A) % cover of native species	minimal COVER less than 10%	0
<input checked="" type="checkbox"/> Tree >5m <input type="checkbox"/> Large herb >1m <input checked="" type="checkbox"/> Grass/grasslike <1m <input type="checkbox"/> Moss/lichen		low COVER between 10% – 25%	2
<input checked="" type="checkbox"/> Shrub 1-5m <input type="checkbox"/> Small herb <1m <input type="checkbox"/> Fern <input type="checkbox"/> Other		reduced COVER between 25% - 75% AND less than 5 boxes ticked OR 5 or more boxes ticked	3
<input type="checkbox"/> Small shrub <1m <input checked="" type="checkbox"/> Grass/grasslike >1m <input checked="" type="checkbox"/> Scrambler/climber		adequate COVER more than 75% AND less than 5 boxes ticked OR 5 or more boxes ticked	4
			5
WEEDINESS	65 % weed cover	50% or more WEED COVER	0
		between 25% - 50% WEED COVER	1
		between 5% - 25% WEED COVER	2
		less than 5% WEED COVER	3
RECRUITMENT A woody species is considered to be recruiting when the number of immature plants (i.e. not flowering or fruiting) of an individual woody species is at least 10% of the total population of that species	(A) Number of woody species present 11 (B) Number of woody species recruiting 2 % recruitment = B/A x 100	less than 30% woody species RECRUITING	0
		between 30% - 70% woody species RECRUITING	1
		70% or more woody species RECRUITING	2
ORGANIC LITTER Defined as small branches (less than 10cm diameter), twigs, leaves and other fallen or dead organic matter	0 % cover of organic litter	less than 5% ORGANIC LITTER	0
		more than 5% ORGANIC LITTER	1
LOGS Defined by length of stumps, fallen trees or branches at least 10 cm diameter (30 cm circumference)	Length of logs greater than 10 cm dia in 50m x 50m (i.e. 0.25 ha) Logs (m) x 4 (i.e. m/ha)	no logs	0
		less than 25m LOGS/ha	0.5
		more than 25m LOGS/ha	1
SIZE Defined by the size of the area being assessed AND any adjoining native vegetation		less than 2 ha	0
		between 2 – 10 ha	1
		more than 10 ha	2
NEIGHBOURHOOD Defined by the % area covered by native vegetation within 1 km of the site being assessed		less than 10% area covered	0
		between 10% - 50% area covered	1
		more than 50% area covered	2
CORE AREA Defined by the distance of the site being assessed from a block of native vegetation greater than 50ha		1 km or more from 50 ha block of native vegetation	0
		less than 1 km from 50 ha block of native vegetation	1

Cathedral Lane - Big Trees_1



Cathedral Lane, Big Trees, 2



Cathedral Lane, Big Trees 3



Cathedral Lane, Big Trees, 4

