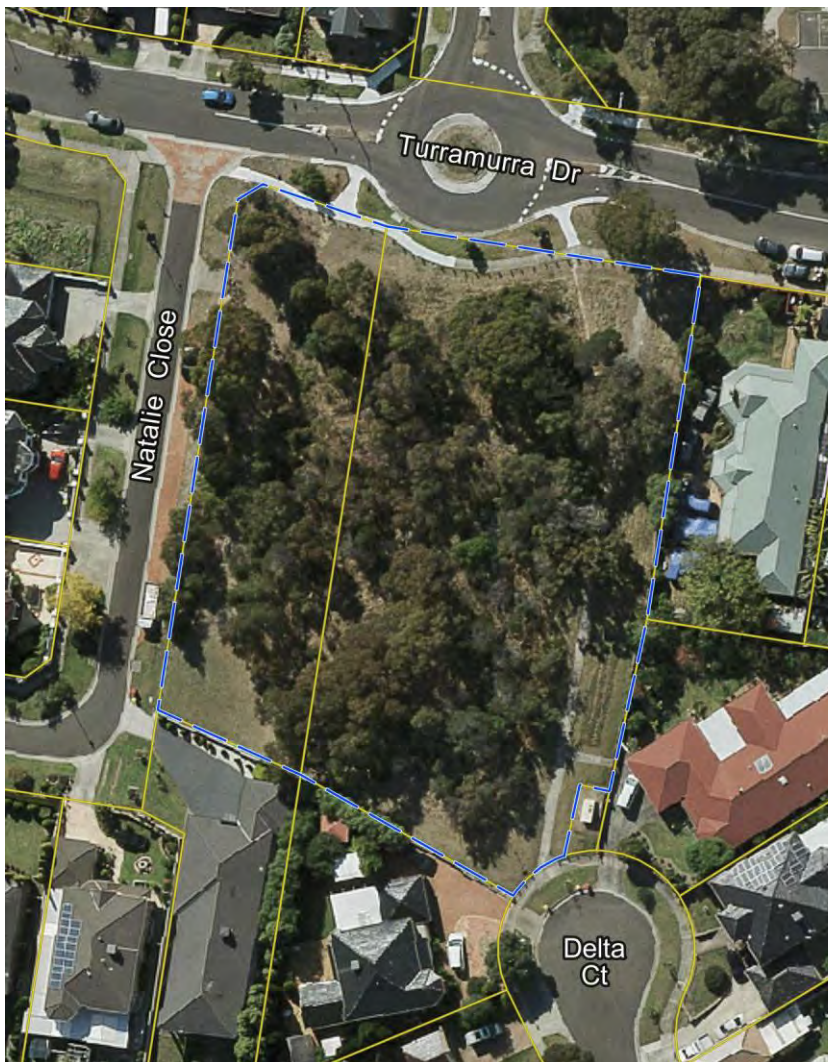


## Site 71. Delta Court Reserve, Rowville

A tiny Council reserve with regrowth of native vegetation supplemented by adjacent revegetation.

Summary of significant features:

- State significance: a patch of the regionally-endangered vegetation type, Valley Heathy Forest, partly in good ecological condition;
- Locally significant: viable populations of some locally-threatened plant species.



1:1,000

0 10 20 30 40 50 m



### Boundaries

The site is the whole reserve, comprising two lots, as outlined with blue dashes on the aerial photograph above. The previous (2010) edition of this report only included the larger, eastern lot; the other is added here because of the success of Knox City Council's revegetation there. The tiny lot for a utility service at the reserve's southeast corner is omitted from the site.

**Land use & tenure:** Council nature reserve.

### Site description

This small reserve of 0.47 ha is at elevations of 72–76 m on a south-facing slope of about 5% gradient. The soil is shallow, poorly draining, pale loam over clay subsoil, derived from weathering of the underlying Lower Devonian siltstone of the Humevale formation.

A 1946 aerial photograph shows this site with only one or two, quite small trees on it, with an open, grassy understorey, consistent with grazing. A 1976 aerial photograph shows that the vegetation in the reserve's eastern lot had been allowed to regenerate, but still with no mature trees, while the western lot had been cleared to grass apart from one small tree. When Knox City Council acquired the reserve as part of the neighbourhood's subdivision in c. 1999, the western lot and a small part of the eastern lot were disused pasture, and the rest of the eastern lot had young regrowth with plenty of environmental weeds such as Gorse.

This history has left the reserve today with a modest number of naturally-occurring indigenous plant species (thirty-nine seen in the author's inexhaustive inspection in 2024) but a high percentage cover of indigenous understorey. The vegetation's composition carries many hallmarks of the regionally-endangered vegetation type, Valley Heathy Forest. Council's bushland staff have vigorously controlled the Gorse that would otherwise have destroyed the site's biological significance. They have also revegetated the western lot and planted some indigenous species in the eastern lot to increase the reproductive success of the wild populations of those species. Some of the planted species today have started to produce new generations.

There is negligible native vegetation east of the north-south path that can be seen on the aerial photograph above. Pipes were laid there as part of the neighbourhood's development and native vegetation has not recovered.

The more ecologically intact native vegetation is in the southern three-quarters of the site.

### Relationship to other land

The nearest places with more than just vestiges of native habitat are the Wellington Rd roadside (Site 96) and the Rowville Electricity Terminal Station (Site 72). Most local native birds and flying insects would be able to fly easily between these sites but the more ecologically sensitive species would not find Delta Court Reserve's habitat sufficiently attractive to cross the main roads and stark residential area between the sites.

**Bioregion:** Gippsland Plain

### Habitat types

Valley Heathy Forest (EVC 127, **Endangered**): Estimated as 0.35 ha, comprising 0.1ha in good ecological condition (rating B) and the rest (including the revegetation) in fair ecological condition (rating C). This is a significant improvement compared with the previous (2010) edition of this report.

Canopy trees: The naturally-occurring trees are dominated by *Eucalyptus radiata* followed by *E. goniocalyx*; also with *E. cephalocarpa* and a minor component of *E. melliodora*. Planting has created an unnaturally high density of eucalypts, which is expected to stunt the growth of the naturally-occurring trees.

Sub-canopy trees: Moderately dense, comprising *Allocasuarina littoralis*, *Acacia mearnsii* and fewer *Exocarpos cupressiformis*.

Shrubs: Severely depleted by past clearing. Remaining species are *Acacia paradoxa*, *Bursaria spinosa*, *Dillwynia cinerascens* and *Leptospermum continentale*. There was a single *Pomaderris racemosa* when the reserve was created, as observed by the author in 2000.

Vines: There are reasonable numbers of the light twiner, *Billardiera mutabilis*.

Ferns: None.

Groundcover: Dominated by *Microlaena stipoides*, *Themeda triandra*, *Poa morrisii* and *Austrostipa rudis* subsp. *rudis*. The following additional species are abundant: *Rytidosperma* species, *Gonocarpus tetragynus*, *Poranthera microphylla* and *Tricoryne elatior*. There are smaller numbers of the following species that are typical of Valley Heathy Forest: *Arthropodium strictum*, *Bossiaea prostrata*, *Burchardia umbellata*, *Caesia parviflora*, *Deyeuxia quadriseta*, *Dichondra repens*, *Eragrostis brownii*, *Hypericum gramineum*, *Leptorhynchos tenuifolius*, *Lomandra filiformis* subsp. *coriacea*, *Oxalis perennans*, *Veronica gracilis* and *Viola hederacea*.

### Plant species

The following wild, indigenous plant species were nearly all observed by the author on 2nd May 2002 or 15th September 2024. The exceptions are the *Muellerina* and *Lagenophora*, which were observed by Hayley Woodward in 2013 and 2016, respectively. Asterisks indicate species only seen in the 2002 survey, which was much more thorough than 2024. Additional species would no doubt be detectable in other seasons. The column headed 'Risk' indicates the indigenous species' risk of dying out in Knox as follows: 'C'=Critically Endangered; 'E'=Endangered; 'V'=Vulnerable; and 'N'=Near threatened.

Risk	Planted species	Risk	Planted species
V	<i>Acacia mearnsii</i> , Black Wattle	E	<i>Hypericum gramineum</i> , Small St John's Wort
	<i>Acacia paradoxa</i> , Hedge Wattle	E	<i>Lagenophora adenosastipitata</i> , a bottle-daisy (2016)
V	<i>Acacia verticillata</i> , Prickly Moses* (planted?)	C	<i>Leptorhynchos tenuifolius</i> , Wiry Buttons*
V	<i>Allocasuarina littoralis</i> , Black Sheoak	C	<i>Leptospermum continentale</i> , Prickly Tea-tree
	<i>Arthropodium strictum</i> , Chocolate Lily		<i>Lomandra filiformis</i> subsp. <i>coriacea</i> , Wattle Mat-rush
	<i>Austrostipa rudis</i> subsp. <i>rudis</i> , Veined Spear-grass		<i>Lomandra longifolia</i> subsp. <i>longifolia</i> , Spiny-headed Mat-rush (planted and their offspring)
	<i>Billardiera mutabilis</i> , Common Apple-berry		<i>Microlaena stipoides</i> , Weeping Grass
N	<i>Bossiaea prostrata</i> , Creeping Bossiaea (wild and planted)	C	<i>Muellerina eucalyptoides</i> , Creeping Mistletoe (2013)
	<i>Burchardia umbellata</i> , Milkmaids	V	<i>Opercularia varia</i> , Variable Stinkweed*
	<i>Bursaria spinosa</i> , Sweet Bursaria		<i>Oxalis exilis/perennans</i> , Wood-sorrel
V	<i>Caesia parviflora</i> , Pale Grass-lily		<i>Poa morrisii</i> , Soft Tussock-grass
	<i>Clematis decipiens</i> , a small-leafed clematis	C	<i>Pomaderris racemosa</i> , Cluster Pomaderris* (now all planted)
C	<i>Daviesia latifolia</i> , Hop Bitter-pea (planted?)		<i>Poranthera microphylla</i> , Small Poranthera
	<i>Deyeuxia quadriseta</i> , Reed Bent-grass*		<i>Rytidosperma laeve</i> , Smooth Wallaby-grass*
	<i>Dianella longifolia</i> var. <i>longifolia</i> , Pale Flax-lily (planted?)		<i>Rytidosperma penicillatum</i> , Slender Wallaby-grass
	<i>Dianella revoluta</i> , Black-anther Flax-lily		<i>Rytidosperma setaceum</i> , Bristly Wallaby-grass*
	<i>Dichondra repens</i> , Kidney-weed		<i>Schoenus apogon</i> , Common Bog-rush
V	<i>Dillwynia cinerascens</i> , Grey Parrot-pea		<i>Themeda triandra</i> , Kangaroo Grass
	<i>Eragrostis brownii</i> , Common Love-grass*		<i>Tricoryne elatior</i> , Yellow Rush-lily
E	<i>Eucalyptus cephalocarpa</i> , Mealy Stringybark	V	<i>Veronica gracilis</i> , Slender Speedwell
V	<i>Eucalyptus goniocalyx</i> , Bundy	E	<i>Viola hederacea</i> , Ivy-leaf Violet*
E	<i>Eucalyptus melliodora</i> , Yellow Box	E	<i>Wurmbea dioica</i> , Common Early Nancy
E	<i>Eucalyptus radiata</i> , Narrow-leaved Peppermint		
V	<i>Exocarpos cupressiformis</i> , Cherry Ballart		
	<i>Gonocarpus tetragynus</i> , Common Raspwort		
	<i>Goodenia ovata</i> , Hop Goodenia (planted and their offspring)		

### Fauna of special significance

None found.

### Fauna habitat features

The groundcover would suit small skinks and ants, including the bullants that the author saw in 2024.

### Significance ratings

The following is an assessment of the site's biological significance against the Department of Energy, Environment & Climate Action's standard criteria (Amos 2004).

#### Endangered Vegetation Types

Leaving aside Delta Court Reserve's revegetation and the strip east of the north-south path, the vegetation meets the definition of a 'remnant patch' adopted by the standard criteria, i.e. a continuous area of at least 0.25 ha in which the cover of native understorey is at least 10% throughout. It belongs to Valley Heathy Forest, which is listed as regionally Endangered. It follows from Appendix 3 of *Victoria's Native Vegetation Management – a Framework for Action* (NRE 2002a) that the remnant patch is of at least High conservation significance. This translates to **State** significance under criterion 3.2.3.

#### Locally-threatened plant species

Most or all of the locally-threatened plant species recorded in 2024 have viable populations, thereby meeting criterion 3.1.5 of Amos (2004) for a site of **Local** significance.

## Threats

- Human-induced climate change, which is predicted to cause more severe droughts, heatwaves and storms, as well as substantially lower rainfall (particularly in winter);
- Decline of tree health, partly due to the abovementioned droughts and storms and partly because eucalypts have been planted at much high densities than can survive to maturity. Thinning of planted eucalypts would help;
- Displacement of indigenous flora by environmental weeds, except that council's weed control has reversed this threat and is expected to continue to do so;
- Loss or decline of plant species whose populations are so small that they are vulnerable to inbreeding, poor reproductive success or elimination by incidents such as being scratched out by a dog. Examples of such species include the four *Burchardia umbellata* plants and the solitary *Wurmbea dioica* that the author detected in 2024.

## Strategic planning

- The previous (2010) edition of this report led to Delta Court Reserve's eastern lot being covered by Schedule 2 of the Environmental Significance Overlay (ESO2), on the basis of the endangered EVC, Valley Heathy Forest. Since 2010, the Valley Heathy Forest on that lot has improved in condition and it has been significantly supplemented by revegetation of the western lot. The reasons for applying the ESO2 have thereby strengthened and extend to the western lot. It is recommended to extend ESO2 to include the western lot and excise the tiny utility lot at the southeast corner of the reserve;
- The eastern lot is zoned Public Park and Recreation Zone (PPRZ) and the western lot is zoned Neighbourhood Residential Zone – Schedule 4 (NRZ4). A single zoning of the whole reserve seems more appropriate.

## Information sources used in this assessment

- An ecological survey by Dr Lorimer for one hour on 24th May 2002 for the first edition of this report. This included a description of the composition and condition of the vegetation, compilation of a list of indigenous and introduced plant species, incidental fauna observations, and checks for fauna habitat, ecological threats, management issues and populations of scarce or threatened plant species;
- A list of grasses seen incidentally by Dr Lorimer during a brief visit to the reserve on 2nd March 2000;
- An inexhaustive botanical survey of the site by Dr Lorimer for 40 minutes on 15th September 2024, compiling a list of wild indigenous plant species and checking for changes in features relevant to this report compared with pre-existing information;
- Records of flora observations stored in Knox City Council's biodiversity database;
- A search for records of flora and fauna observations stored in the Atlas of Living Australia, finding none;
- Aerial and satellite imagery from between 1946 and 2025;
- The Victorian Government's 'NatureKit' website;
- Maps of geology, topography and strategic planning information produced by agencies of the Victorian Government.