

## Site 112. Starlight Treed Precinct, Rowville

A treed residential area west of Stud Rd and some partly undeveloped properties larger than 2 ha east of Stud Rd.

Summary of significant features:

- **Locally significant:** many trees of locally-threatened species, which facilitate movements of birds, bats, tree frogs and flying insects around the local landscape in pursuit of their daily and seasonal needs;
- **Locally significant:** a substantial population (last surveyed in 2002) of the locally-threatened Hill Wallaby-grass (*Rytidosperma erianthum*), suspected to still be present east of Stud Rd;
- **Locally significant:** part of the site offers potential, with revegetation, to plug a gap in a habitat corridor;
- **Potentially State significance:** a patch of the regionally-endangered vegetation type, Swampy Woodland, at 1331 Stud Rd – last inspected in 2002 and of uncertain current status.

**Aerial photograph and map:** See the next page.

### Boundaries

The site comprises the two areas outlined with blue dashes on the aerial photograph, excluding Starlight Reserve. The boundaries follow property boundaries except within road reserves. The total area is 92.5 ha. Compared with the previous (2010) edition of this report, 32 Police Rd and six properties on Tanglewood Rd have been excised due to habitat loss.

### Land use & tenure

- West of Stud Rd: Freehold residential land, park and streets;
- East of Stud Rd (which is outside the Urban Growth Boundary): Cultural meeting place, building materials supplier and farmlets.

### Site description

The residential neighbourhood on the western side of Stud Rd contains a substantial number of mature remnant eucalypts (some of them pre-dating settlement) and mature planted eucalypts from other parts of Australia. Street trees represent a significant fraction of the mature Australian native trees. All these trees provide a tree canopy that, despite its fragmentation, provides basic habitat needs for native birds, bats, possums, tree frogs and invertebrates. Substantial numbers of native forest birds, such as Crimson Rosellas and Eastern Rosellas, frequent the area, which can be attributed to the site's trees and the presence of more substantial areas of habitat in the neighbouring sites of biological significance.

Many of the properties west of Stud Rd are of no biological significance. They are unaffected by the Vegetation Protection Overlay that covers them, as they contain none of the types of trees that the overlay affects.

The section of the site east of Stud Rd has lots larger than 2 ha. There are remnant eucalypts and wattles, some of which are large and old, but they are very patchy in distribution. There is also native understorey beneath remnant trees in an area of 0.45 ha at the eastern end of 1331 Stud Rd (clearly visible on the aerial photograph). However, the understorey is badly affected by the declared noxious weeds, Blackberry and Gorse. The vegetation belongs to the regionally-endangered vegetation type, Swampy Woodland.

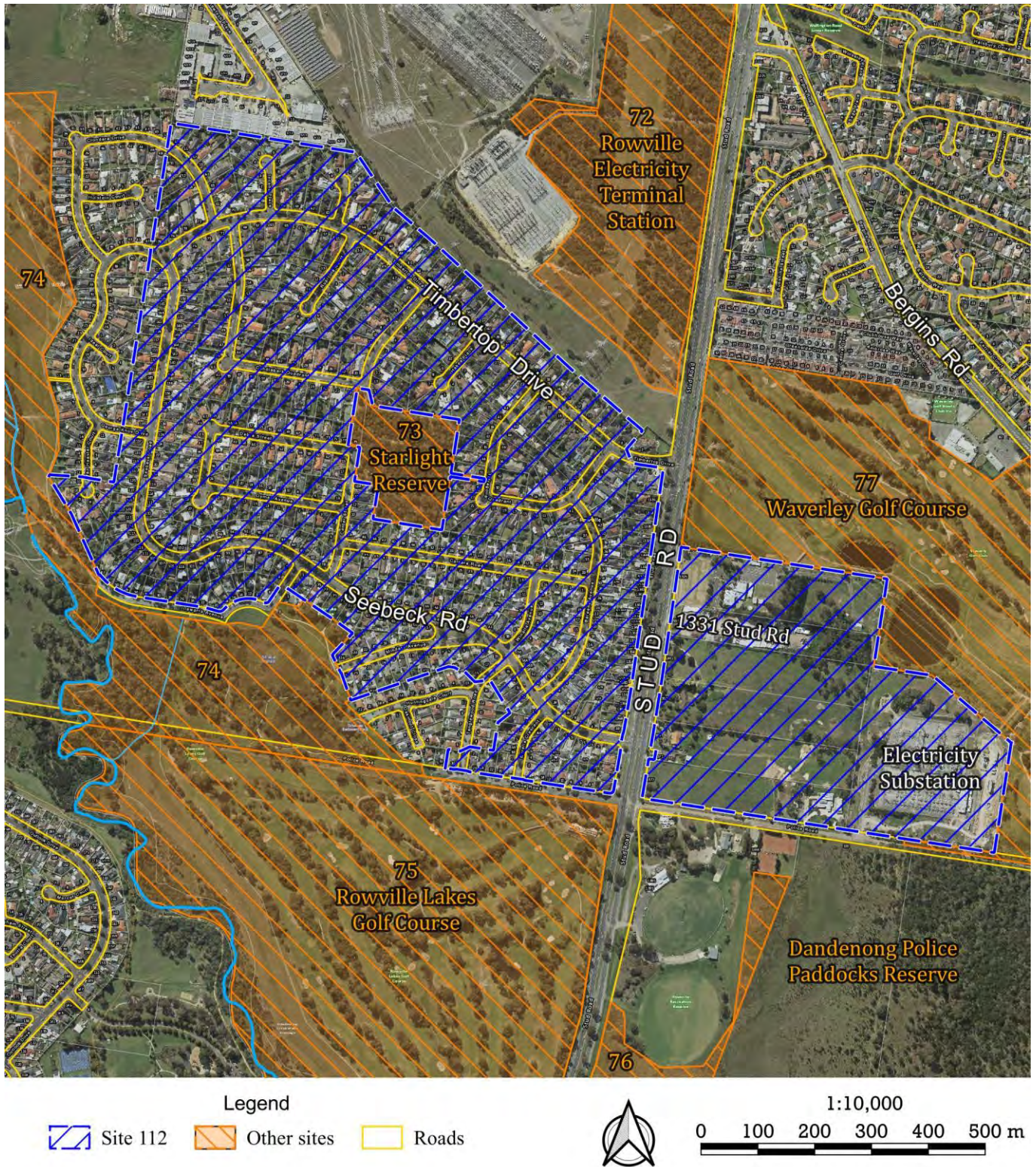
Planting of trees in the untreed areas east of Stud Rd has the potential to substantially improve habitat links through southern Rowville, because of the strategic location for fauna movements.

### Relationship to other land

The value of the site's habitat is enhanced by the location on the Dandenong Creek habitat corridor and the presence of the abutting sites of biological significance shown on the aerial photograph. The Starlight treed precinct represents a habitat link for faunal movements between these other sites.

Starlight Reserve (Site 73) is embedded within the precinct and undoubtedly attracts some native birds, insects and perhaps other fauna through the site. The tree cover within the precinct generally is believed to help facilitate such movements.

Without such movements, the habitat at the Rowville Electricity Terminal Station (Site 72) would be much more ecologically isolated and hence of less value to nomadic fauna and more at risk of inbreeding and tree dieback.



**Bioregion:** Gippsland Plain

**Habitat types**

Valley Heathy Forest (EVC 127, **regionally Endangered**). Reduced to scattered trees (mainly *Eucalyptus cephalocarpa*, *Eucalyptus radiata* and *Eucalyptus gonicalyx*) and localised occurrence of a few hardy understorey species.

Swampy Woodland (EVC 937, **regionally Endangered**), dominated by *Eucalyptus ovata* and *Melaleuca ericifolia*. Only scattered trees remain of most of the Swampy Woodland except for 0.45 ha at the eastern end of 1331 Stud Rd.

### Plant species

The following wild, indigenous plant species were recorded by the author on 28th November 2002. Some of these species (particularly the *Amyema*) may have since died out but on the other hand, 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; and 'V'=Vulnerable.

Risk	Species	Risk	Species
V	<i>Acacia mearnsii</i> , Black Wattle		<i>Microlaena stipoides</i> , Weeping Grass
	<i>Acacia paradoxa</i> , Hedge Wattle	V	<i>Ozothamnus ferrugineus</i> , Tree Everlasting
C	<i>Amyema pendula</i> , Drooping Mistletoe	V	<i>Rytidosperma erianthum</i> , Hill Wallaby-grass
	<i>Dichondra repens</i> , Kidney-weed		<i>Rytidosperma laeve</i> , Smooth Wallaby-grass
E	<i>Eucalyptus cephalocarpa</i> , Mealy Stringybark		<i>Rytidosperma penicillatum</i> , Slender Wallaby-grass
V	<i>Eucalyptus goniocalyx</i> , Bundy		<i>Rytidosperma pilosum</i> , Velvet Wallaby-grass
V	<i>Eucalyptus ovata</i> , Swamp Gum		<i>Rytidosperma racemosum</i> , Clustered Wallaby-grass
E	<i>Eucalyptus radiata</i> , Narrow-leaved Peppermint		<i>Themeda triandra</i> , Kangaroo Grass
V	<i>Exocarpos cupressiformis</i> , Cherry Ballart		
E	<i>Melaleuca ericifolia</i> , Swamp Paperbark		

During the author's ecological survey of the site in 2002, Hill Wallaby-grass (*Rytidosperma erianthum*) was found to be the dominant groundcover species on the ridge and upper slope of the 'Syrena' Polish House property on the east side of Stud Rd. This species has been reliably recorded at only one other locality in Knox. The author knows of no subsequent survey of the property's vegetation but the abundance in 2002 and the appearance of the habitat on recent satellite imagery suggests that the species may well persist.

### Fauna of special significance

None detected.

### Fauna habitat features

The remnant tree cover, combined with mature planted trees, represent basic habitat for native forest birds, bats, possums, tree frogs and invertebrates. Some of the large trees have hollows that are likely to be inhabited by birds or bats.

### 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).

#### *Ecological Integrity and Viability*

As discussed above, the site is an important ecological link for local-scale movements of native fauna. Criterion 1.2.6 attributes **Local** significance to sites like this that meet the description, 'Important at local scale - Link between individual remnant habitat blocks'.

The electricity substation and land from there to Stud Rd represent a habitat gap between the Dandenong Police Paddocks Reserve and habitat west of Stud Rd. This area fits the description in criterion 1.3.3 of a 'Cleared or degraded area which may with suitable habitat reconstruction or rehabilitation work form ... a strategic corridor of local importance and scale'. Such an area is accorded **Local** significance under that criterion.

#### *Regionally Threatened Vegetation Types*

The Swampy Woodland at 1331 Stud Rd was assessed in 2002 as qualifying as a 'remnant patch', as defined by the standard criteria. It is uncertain whether it retains enough native understorey to still qualify as a remnant

patch. If it does, the regionally-endangered status of Swampy Woodland means that the remnant patch is of State significance under criterion 3.2.3.

The remaining native vegetation in the site has too little native understorey to qualify as a remnant patch, so the standard criteria do not accord any significance to the regionally-endangered status.

#### Threatened Plants

*Rytidosperma erianthum* is threatened with dying out in Knox but not throughout the whole of the relevant bioregion. The habitat for the species is therefore of **Local** significance under criterion 3.1.5.

The site's tree species are all locally threatened and most or all of them have viable populations within the site, thereby meeting criterion 3.1.5 for **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);
- Debilitation and deaths of trees, partly due to the abovementioned droughts and storms;
- Lack of natural replacement of remnant trees as they die;
- Ecological deterioration (including loss of indigenous species) in the site's only substantial area of native understorey (1331 Stud Rd) due to environmental weeds such as Blackberry and Gorse;
- Residential development, particularly if the Urban Growth Boundary is moved.

#### Strategic planning

- As a result of the previous (2010) edition of this report, Schedule 4 of the Vegetation Protection Overlay (VPO4) applies to the slightly different version of the site that was delineated at that time. The stated reasons for applying VPO4 were that:
  - It is a site of Local biological significance (or potentially State significance, in the case of 1331 Stud Rd);
  - Most of it contains (in the words of the VPP Practice Note on Biodiversity) 'scattered living food trees with an exotic understorey';
  - The properties west of Stud Rd are too small to be affected by Clause 52.17 of the Knox Planning Scheme, which might otherwise provide some of the trees with some protection; and
  - Some of the habitat trees are not native to Victoria and are therefore not protected by Clause 52.17.

These features remain current. The only matter to consider regarding amending VPO4 on the site is whether to excise 32 Police Rd and six properties on Tanglewood Rd, as has been done here. However, the effort required by such an amendment may well not be justified, as the excised properties contain no vegetation of the type affected by VPO4.

- The area west of Stud Rd is inside the Urban Growth Boundary and the eastern side of Stud Rd is not.

#### Information sources used in this assessment

- A general inspection of the area by Dr Lorimer in 2002–2003 for the first edition of this report;
- A botanical survey of the 'Syrena' Polish House property on the east side of Stud Rd by Dr Lorimer on 28/11/02 for the first edition of this report, including:
  - Compilation of lists of indigenous and introduced plants in each of two parts of the property and on the adjoining properties seen through the fence;
  - Mapping of vegetation communities;
  - A description of the vegetation's structural and floristic composition and ecological condition;
  - Incidental fauna observations; and
  - Checks for fauna habitat, ecological threats and management issues;
- Dr Lorimer's reassessment of the site's biological significance for the Knox Housing Strategy, as discussed in his report to Knox City Council titled 'Implications of Sites of Biological Significance on the Draft Knox Housing Strategy' and dated 14th August 2014;
- A vegetation survey of the site for this edition during 2024, on foot and by car, including redetermination of the site's boundary;
- General visual inspection of the area's vegetation by the author while surveying the neighbouring sites of biological significance during 2024;

- A search in vain for records of flora and fauna observations stored in Knox City Council's biodiversity database;
- Flora and fauna observations stored in the Atlas of Living Australia;
- Aerial and satellite imagery from between 1946 and 2024;
- The Victorian Government's 'NatureKit' website;
- Maps of geology, topography and strategic planning information produced by agencies of the Victorian Government.