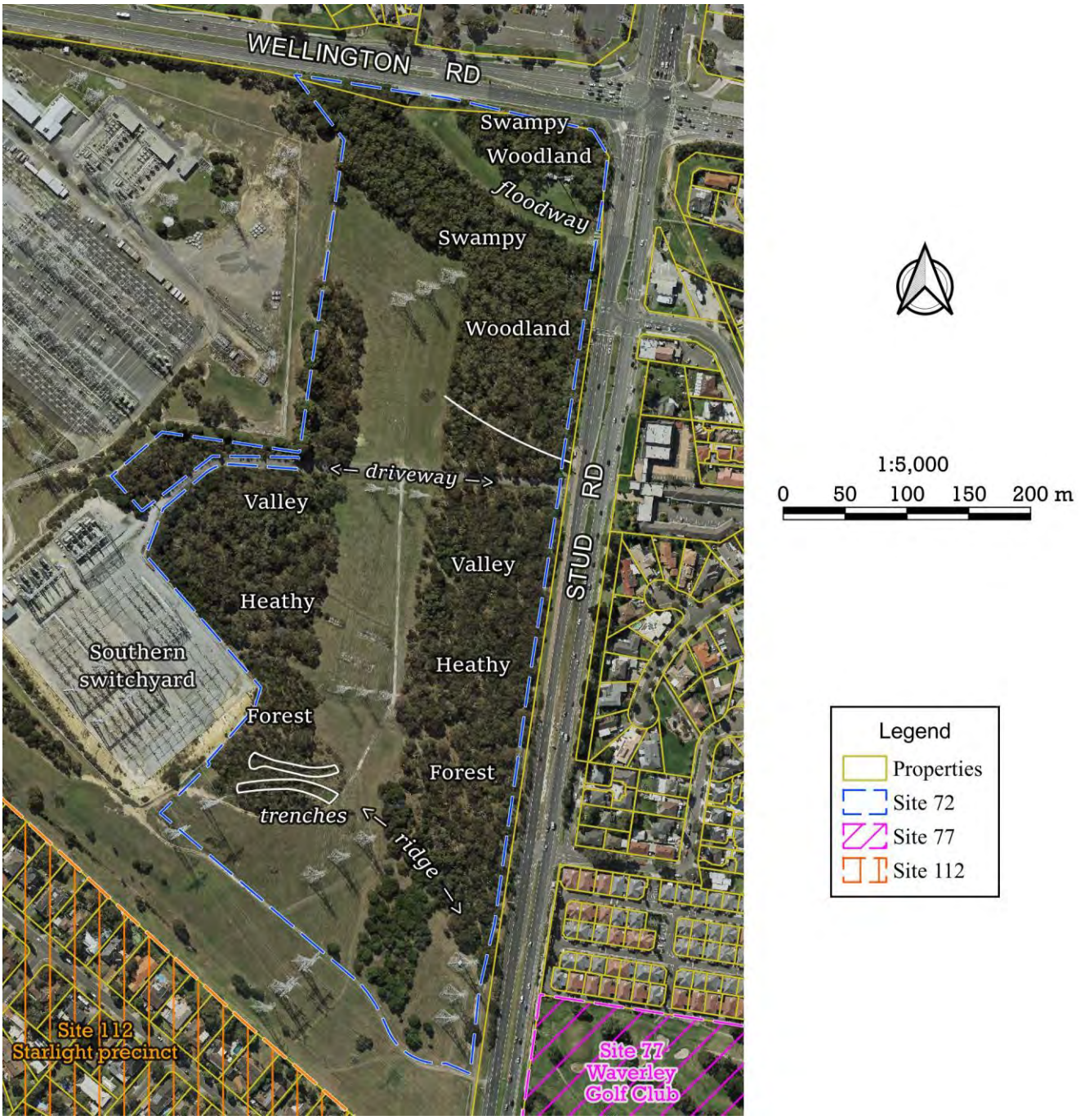
Site 72. Rowville Electricity Terminal Station

Sections of a major electricity infrastructure property with highly significant native vegetation under threat from uncontrolled declared noxious weeds.

Summary of significant features:

- Nationally significant: a population of the Matted Flax-lily (*Dianella amoena*) which is listed as Endangered under Commonwealth legislation (but being smothered in Site 72 by declared noxious weeds);
- State significance: populations of two species listed as Endangered in Victoria: the spear-grass, *Austrostipa rudis* subspecies *australis* and the Bulging Fireweed (*Senecio campylocarpus*);
- State significance: patches of the regionally-endangered vegetation types, Swampy Woodland and Valley Heathy Forest (but both in decline due to uncontrolled declared noxious weeds);
- Regionally significant: known habitat of the regionally-threatened Pointed Swamp Wallaby-grass;
- Locally significant: viable populations of scores of plant species that are threatened with dying out in Knox.



Boundaries

This site is outlined with blue dashes on the aerial photograph on the previous page. Note that the fence along Stud Rd (which is a site boundary) is several metres inside the property boundary. Compared with the previous (2010) edition of this report, the site area has been expanded by 0.3 ha to include regrowth of Valley Heathy Forest on ground that had been cleared in c. 2006 for expansion of the southern switchyard.

Land use & tenure: Public land managed by SP AusNet, principally for provision of electricity services.

Site description

This 17.4-hectare site includes:

- The ridgetop marked on the aerial photograph above, running through the marked trenches;
- The northern slopes of the ridge, down to a floodway (formerly a creek) in the site's northeastern corner; and
- The ridge's upper southwest-facing slopes.

The elevation range is 49–79 m and the gradient at mid-slope is approximately 8%.

The ridge has formed from the Humevale formation of Lower Devonian siltstone, which has decomposed to form stony clay subsoil and pale loam soil that is shallow, poorly-draining and silty. At the foot of the ridge, within the area marked as Swampy Woodland on the aerial photograph, the soil is formed from silt washed down the hill and from further up the valley.

The dearth of large, old trees reflects the site's history of clearing, grazing and Second World War military activity. A 1946 aerial photograph (immediate post-war) shows the current-day Swampy Woodland almost devoid of shrubs and trees, and the rest of the site densely crisscrossed with tracks among young trees with very little understorey. On the top of the ridge, one can still see today trenches that apparently had a role in preparation for a possible Japanese invasion toward the end of the war. Ruins of wartime buildings can still be seen on the north-facing slope. The ridge was regarded as an important line of defence against an invasion from the south.

The diversity of native vegetation has suffered from this history (particularly in the case of shrubs) and there is a legacy of environmental weeds such as Gorse and blackberry. In recent years, even the declared noxious weeds have been allowed to become rampant, except in the slashed strips. Conversely, native vegetation – including locally-threatened species – have been killed with herbicide in recent years within a strip typically 3–4 m wide inside the Stud Rd fence. The result of the herbicide is that opportunistic introduced species have replaced the indigenous plants, some of which were very rare in Knox. The rapid, recent deterioration of the vegetation is particularly disappointing, considering the very high significance of that vegetation, as described below.

Despite the site's history, it retains approximately 100 indigenous plant species, including some that are quite rare and many that are close to local extinction within Knox. The most threatened species is the Matted Flax-lily (*Dianella amoena*), which is listed as Endangered under Commonwealth legislation and Critically Endangered under Victorian legislation. There is also a spear-grass and a fireweed that are both listed as Endangered under Victorian legislation. The flax-lily and fireweed are being suppressed by dense Gorse and blackberry.

The aerial photograph is marked to show treed areas of the regionally-endangered vegetation types, Swampy Woodland and Valley Heathy Forest. The majority of the site's rare plants are in the Swampy Woodland south of the floodway. The trees of the Valley Heathy Forest have low stature for their age, indicating that the soil is rather infertile.

There is also a high percentage cover of low-growing indigenous plants (especially Kangaroo-grass, *Themeda triandra*) in the slashed strips beneath the high-voltage transmission lines, whose pylons can be seen on the photograph.

The trenches marked on the aerial photograph are on the ridgetop but they have the most consistently wet soil in the site. This has enabled wetland vegetation to establish in a part of the landscape where they could not occur in nature. The colonisation of the trenches by indigenous plants is remarkable, including at least fifteen species that have presumably arrived by wind or on waterbirds. Some of these species are rare or threatened, either in Knox or throughout the Melbourne area. Unfortunately, blackberry has been allowed to become dense around the trenches.

Relationship to other land

Many native birds, bats and flying insects would be likely to move between this site, Starlight Reserve (Site 73), the Waverley Golf Club (Site 77), the Dandenong Creek habitat corridor (e.g. Sites 74 and 75) and the Lysterfield Hills. The moderate cover of Australian native trees in the Starlight treed precinct (Site 112) is expected to encourage such movements.

Bioregion: Gippsland Plain

Habitat types

Artificial wetland (EVC 74, listed as regionally endangered, but in this case the depression is artificial), comprising the trenches on the ridgetop. Estimated to occupy 0.14 ha, in fair ecological condition (rating C). 17 indigenous plant species have been recorded.

Woody vegetation: None, although *Leptospermum continentale* grows on the edge.

Ferns: One patch of *Hypolepis glandulifera* was seen in the author's 2002 survey.

Semi-aquatic flora: Dominated by *Centella cordifolia* and *Isolepis fluitans*. Other species include *Alisma plantago-aquatica, Eleocharis acuta, Isotoma fluviatilis, Lobelia anceps,* five indigenous *Juncus* species, *Persicaria decipiens* and *Schoenus apogon*.

Swampy Woodland (EVC 937, **regionally Endangered**): Estimated as 3 ha comprising 2 ha in fair ecological condition (rating C) and 1 ha in poor ecological condition (rating D). 43 indigenous plant species were recorded in 2002 and most or all remain (as well as several extra species seen in 2024).

Canopy trees: *Eucalyptus ovata* and far fewer *E. cephalocarpa* plus perhaps just one *E. radiata*.

Sub-canopy trees: *Acacia melanoxylon*.

Shrubs: Becoming heavily dominated by declared noxious weeds. Indigenous species are low in diversity and low to moderate in density. The indigenous species with substantial numbers are *Leptospermum continentale, Leptospermum scoparium* and *Ozothamnus ferrugineus*. The only other species is *Solanum laciniatum*.

Vines: Absent.

Ferns: Very scarce – a very small amount of *Pteridium esculentum*.

Groundcover: Densely grassy. The dominant grasses are *Microlaena stipoides* and the introduced *Anthoxanthum odoratum*. Other species that are dominant in patches are *Juncus* species, *Schoenus tesquorum* or the weeds *Paspalum dilatatum, Rubus anglocandicans* or *Watsonia meriana*. Other abundant species are *Lomandra longifolia* and *Austrostipa rudis* subsp. *rudis*. *Epilobium hirtigerum* is moderately common and serves as a good ecological indicator. *Hookerochloa hookeriana* is another good indicator.

Valley Heathy Forest (EVC 127, **Endangered**): Estimated as 8.5 ha in area (excluding the slashed area beneath the transmission lines), all in fair ecological condition (rating C).

Canopy trees: Dominated by *Eucalyptus cephalocarpa,* joined by *E. radiata* on the upper slopes. *Eucalyptus goniocalyx* is fairly abundant on the ridgetop.

Sub-canopy trees: Mostly sparse. Dominated by *Acacia mearnsii* and *Acacia melanoxylon*. *Allocasuarina littoralis* and *Exocarpos cupressiformis* are also present.

Shrubs: Severely depleted by past clearing. The more abundant indigenous species are *Acacia paradoxa, Bursaria spinosa* and *Leptospermum continentale*. The only others are '*Kunzea* sp. (Upright form)' (which may be present solely as a result of it being planted many years ago) and *Ozothamnus ferrugineus*.

Vines: *Billardiera mutabilis* is very scarce.

Ferns: There is a small amount of *Pteridium esculentum*.

Groundcover: Dominated by *Microlaena stipoides* and *Austrostipa rudis* subsp. *rudis*, also with patches of dense *Themeda triandra.* Other abundant species are *Arthropodium strictum*, various *Rytidosperma* species and *Tricoryne elatior*. Less abundant species that are good ecological indicators include *Dianella longifolia, Dichondra repens, Gonocarpus tetragynus, Lepidosperma gunnii, Leptorhynchos tenuifolius, Lomandra filiformis* and *Veronica gracilis*.

Regularly slashed ground flora of Valley Heathy Forest beneath the transmission lines. Estimated as 5.4 ha, all in fair ecological condition (rating C). 35 indigenous plant species were recorded.

Shrubs: There are scattered, stunted specimens of *Acacia paradoxa*, *Bursaria spinosa*, *Cassinia sifton*, *Leptospermum continentale*, *Kunzea* and *Ozothamnus ferrugineus*.

Vines: Absent.

Ferns: There is a small amount of *Pteridium esculentum*.

Groundcover: Dominated by *Themeda triandra*, *Microlaena stipoides* and *Austrostipa rudis* subsp. *rudis*. *Drosera peltata* s.l. is abundant in places, despite being undetected in the rest of the site. Most of the ground cover species in the unslashed Valley Heathy Forest are also present in the slashed strip.

Plant species

The following plant species have been recorded growing wild within the site. Those species not seen during the author's inspection of the site from the periphery in 2024 are indicated by superscripts showing the year of the most recent record. 2002–2003 records are from the author's survey for the first edition of this report; 2012 is from a survey by the author and the Knox Environment Society. Only the most impactful of the introduced species were recorded in 2024. The reliability of some of the 1999 data is questionable. 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. The species with names in bold are rare throughout metro Melbourne; *Dianella amoena* and *Austrostipa rudis* subsp. *australis* are listed under legislation.

Risk	Wild indigenous vascular species
V	*Acacia mearnsii*, Black Wattle
V	*Acacia melanoxylon*, Blackwood
	Acacia paradoxa, Hedge Wattle
V	*Acacia verticillata*, Prickly Moses
	Acaena novae-zelandiae, Bidgee-widgee
N	*Alisma plantago-aquatica*, Water Plantain
V	*Allocasuarina littoralis*, Black Sheoak
C	***Amphibromus archeri*, Pointed Swamp Wallaby-grass** [2002]
C	*Amyema pendula*, Drooping Mistletoe
	Arthropodium strictum, Chocolate Lily
C	*Asperula conferta*, Common Woodruff [1999]
V	***Austrostipa rudis* subsp. *australis*, Veined Spear-grass**
	Austrostipa rudis subsp. *rudis*, Veined Spear-grass
	Billardiera mutabilis, Common Apple-berry [2012]
N	*Bossiaea prostrata*, Creeping Bossiaea
	Burchardia umbellata, Milkmaids [2012]
	Bursaria spinosa, Sweet Bursaria
	Carex appressa, Tall Sedge [1999]
	Cassinia longifolia, Shiny Cassinia
	Carex breviculmis, Short-stem Sedge [1999]
E	*Carex gaudichaudiana*, Fen Sedge
	Carex inversa, Knob Sedge [2002]
E	*Centella cordifolia*, Centella
V	*Coprosma quadrifida*, Prickly Currant-bush
	Deyeuxia quadriseta, Reed Bent-grass [2012]
C	***Dianella amoena*, Matted Flax-lily**
	Dianella longifolia var. *longifolia*, Pale Flax-lily
	Dianella revoluta, Black-anther Flax-lily [2012]
	Dichelachne rara, Short-hair Plume-grass [2012]
	Dichondra repens, Kidney-weed

Risk	Wild indigenous vascular species
V	*Dillwynia cinerascens*, Grey Parrot-pea
N	*Drosera peltata* s.l., a sundew [2002]
	***Drosera pygmaea*, Tiny Sundew** [1999]
V	*Eleocharis acuta*, Common Spike-rush
E	***Eleocharis gracilis*, Slender Spike-rush**
	Epilobium billardiereanum subsp. *intermedium*, Robust Willow-herb
	Epilobium hirtigerum, Hairy Willow-herb [2002]
	Eragrostis brownii, Common Love-grass
C	***Eryngium vesiculosum*, Prickfoot [1999]**
E	*Eucalyptus cephalocarpa*, Mealy Stringybark
V	*Eucalyptus goniocalyx*, Bundy
V	*Eucalyptus ovata*, Swamp Gum
E	*Eucalyptus radiata*, Narrow-leaved Peppermint
E	*Euchiton sphaericus*, Star Cudweed [1999]
V	*Exocarpos cupressiformis*, Cherry Ballart
C	*Gahnia radula*, Thatch Saw-sedge [1999]
V	*Glyceria australis*, Australian Sweet-grass
	Gonocarpus tetragynus, Common Raspwort
C	*Goodenia humilis*, Swamp Goodenia
	Goodenia ovata, Hop Goodenia
C	*Gratiola peruviana*, Austral Brooklime [1999]
C	*Haloragis heterophylla*, Varied Raspwort
V	*Hemarthria uncinata*, Mat Grass [2012]
C	***Hookerochloa hookeriana*, Hooker Fescue**
E	*Hypericum gramineum*, Small St John's Wort
C	***Hypolepis glandulifera*, Downy Ground-fern [2002]**
C	*Imperata cylindrica*, Blady Grass [1999]
C	***Isolepis fluitans*, Floating Club-rush**
	Isolepis inundata, Swamp Club-rush
V	*Isolepis platycarpa*, a club-rush
C	*Isotoma fluviatilis* subsp. *australis*, Swamp Isotome [2002]

Risk	Wild indigenous vascular species
	Juncus amabilis, Hollow Rush
	Juncus bufonius, Toad Rush [2012]
C	*Juncus fockei*, Slender Joint-leaf Rush
	Juncus gregiflorus, Green Rush [2002]
C	*Juncus holoschoenus*, Joint-leaf Rush
	Juncus pallidus, Pale Rush
E	*Juncus planifolius*, Broad-leaf Rush
	Juncus sarophorus, Broom Rush
E	*Juncus subsecundus*, Finger Rush [2012]
	Kunzea sp. (Upright form), a burgan (probably only from plantings)
	Lachnagrostis filiformis, Common Blown-grass
	Laphangium luteoalbum, Jersey cudweed [1999]
	Lepidosperma gunnii, Slender Sword-sedge
C	*Leptorhynchos tenuifolius*, Wiry Buttons [2012]
C	*Leptospermum continentale*, Prickly Tea-tree
	Leptospermum scoparium, Manuka
E	*Linum marginale*, Native Flax [2012]
	Lomandra filiformis subsp. *coriacea*, Wattle Mat-rush
	Lomandra filiformis subsp. *filiformis*, Wattle Mat-rush
	Lomandra longifolia subsp. *longifolia*, Spiny-headed Mat-rush
	Lythrum hyssopifolia, Lesser Loosestrife
C	***Machaerina arthrophylla*, Fine Twig-rush**
E	*Melaleuca ericifolia*, Swamp Paperbark [1999]
	Microlaena stipoides, Weeping Grass
V	*Microtis parviflora*, Slender Onion-orchid [2012]
V	*Opercularia ovata*, Broad-leaf Stinkweed
V	*Opercularia varia*, Variable Stinkweed [2012]
C	*Ottelia ovalifolia*, Swamp Lily [1999]
	Oxalis exilis/perennans, Wood-sorrel
V	*Ozothamnus ferrugineus*, Tree Everlasting
E	*Pauridia vaginata*, Sheath Star
	Persicaria decipiens, Slender Knotweed
E	*Pimelea humilis*, Common Rice-flower
E	*Plantago varia*, Variable Plantain [1999]
E	*Poa labillardierei*, Common Tussock-grass [1999]
	Poa morrisii, Soft Tussock-grass [2012]
E	*Poa tenera*, Slender Tussock-grass [2002]
	Poranthera microphylla, Small Poranthera
	Pteridium esculentum, Austral Bracken [2012]
E	*Rubus parvifolius*, Small-leaf Bramble [1999]
C	*Rytidosperma duttonianum*, Brown-back Wallaby-grass [1999]
V	*Rytidosperma erianthum*, Hill Wallaby-grass [2012]
	Rytidosperma geniculatum, Kneed Wallaby-grass [2002]
	Rytidosperma pilosum, Velvet Wallaby-grass
	Rytidosperma racemosum, Clustered Wallaby-grass

Risk	Wild indigenous vascular species
E	*Rytidosperma semiannulare*, Tasmanian Wallaby-grass [2003]
	Rytidosperma setaceum, Bristly Wallaby-grass [2012]
	Rytidosperma tenuius, Purplish Wallaby-grass [2012]
	Schoenus apogon, Common Bog-rush [2012]
C	***Schoenus tesquorum*, Soft Bog-rush**
E	***Senecio campylocarpus*, Bulging Fireweed**
V	*Senecio glomeratus*, Annual Fireweed
	Senecio quadridentatus, Cotton Fireweed [2012]
V	*Solanum laciniatum*, Large Kangaroo Apple [2002]
V	*Solenogyne dominii*, Smooth Solenogyne [1999]
E	*Thelymitra peniculata*, Trim Sun-orchid [2012]
C	*Thelymitra brevifolia*, Peppertop Sun-orchid [2012]
	Themeda triandra, Kangaroo Grass [2012]
	Tricoryne elatior, Yellow Rush-lily
V	*Veronica gracilis*, Slender Speedwell
E	*Viola hederacea*, Ivy-leaf Violet [1999]
	Wahlenbergia gracilis, Sprawling Bluebell [2002]
E	*Wurmbea dioica*, Common Early Nancy

Introduced species

Acacia longifolia subsp. *longifolia*, Sallow Wattle
Agrostis capillaris, Brown-top Bent
Aira cupaniana, Small Hair-grass [1999]
Aira elegantissima, Delicate Hair-grass [1999]
Aira praecox, Early Hair-grass [1999]
Aira sp., Hair Grass [2002]
Allium triquetrum, Angled Onion [2002]
Anthoxanthum odoratum, Sweet Vernal-grass
Axonopus fissifolius, Narrow-leafed Carpet-grass
Briza maxima, Large Quaking-grass [2002]
Bromus catharticus, Prairie Grass [2002]
Cassinia sifton, Sifton Bush
Cenchrus clandestinus, Kikuyu Grass
Centaurium erythraea, Common Centaury
Cerastium glomeratum s.l., Common Mouse-ear Chickweed [1999]
Cicendia filiformis, Slender Cicendia [2002]
Cirsium vulgare, Spear Thistle [2002]
Coprosma repens, Mirror-bush [1999]
Cortaderia selloana, Pampas Grass [1999]
Crataegus monogyna, Hawthorn
Cynodon dactylon, Couch
Cyperus eragrostis, Drain Flat-sedge
Dactylis glomerata, Cocksfoot
Disa bracteata, South African Orchid
Ehrharta erecta, Panic Veldt-grass
Ehrharta longiflora, Annual Veldt-grass
Erigeron bonariensis, Flaxleaf Fleabane
Fraxinus angustifolia, Desert Ash
Galium aparine, Cleavers [2002]
Gamochaeta purpurea, Spiked Cudweed [2002]

Introduced species

Gladiolus undulatus, Wild Gladiolus [2002]
Holcus lanatus, Yorkshire Fog [2002]
Hypochaeris glabra, Smooth Cat's Ear [1999]
Hypochaeris radicata, Cat's Ear
Isolepis levynsiana, Tiny Flat-sedge
Juncus ?*pallescens*, a rush
Juncus articulatus, Jointed Rush
Leontodon saxatilis, Lesser Hawkbit
Linum trigynum, French Flax
Lonicera japonica, Japanese Honeysuckle
Lotus subbiflorus, Hairy Bird's-foot Trefoil
Lysimachia arvensis, Pimpernel [2012]
Lythrum junceum, Mediterranean Loosestrife
Melaleuca armillaris, Bracelet Honey-myrtle [2002]
Opercularia ovata, Broad-leaf Stinkweed
Paspalum dilatatum, Paspalum [2002]
Paspalum distichum, Water Couch
Phalaris aquatica, Toowoomba Canary-grass [2002]
Phalaris minor, Lesser Canary-grass [1999]
Pittosporum undulatum, Sweet Pittosporum
Plantago lanceolata, Ribwort [2002]

Introduced species

Poa annua/infirma, a meadow-grass [1999]
Prunella vulgaris, Self-heal
Pseudoscleropodium purum, Neat Feather-moss
Ranunculus repens, Creeping Buttercup [2002]
Romulea rosea, Common Onion-grass
Rosa rubiginosa, Sweet Briar [2002]
Rubus anglocandicans, Blackberry
Rumex crispus, Curled Dock [1999]
Setaria parviflora, Slender Pigeon Grass
Sisyrinchium micranthum, Blue Pigroot
Solanum nigrum, Black Nightshade [1999]
Sonchus oleraceus, Sow-thistle
Sporobolus africanus, Rat-tail Grass
Stenotaphrum secundatum, Buffalo Grass [1999]
Taraxacum sect. *Taraxacum*, Garden Dandelion [1999]
Trifolium repens, White Clover [1999]
Typha latifolia, Great Reedmace
Ulex europaeus, Gorse (Furze)
Vulpia bromoides, Squirrel-tail Fescue [2002]
Watsonia meriana var. *bulbillifera*, Bulbil Watsonia

Notes concerning some of the significant plant species

Listed as Endangered under Commonwealth law and Critically Endangered under Victorian law

Dianella amoena (Matted Flax-lily): Two plants were found in the Swampy Woodland in January 2024, becoming smothered by Gorse. Others may well have escaped detection during that brief site inspection, including the ones seen in the Swampy Woodland by the author in 2012 and by James Rose beneath the transmission line towers near the driveway.

Listed as Endangered under Victorian law

Austrostipa rudis subsp. *australis* (a subspecies of Veined Spear-grass): Fairly abundant on the ridgetop in 2024; also seen further north in previous surveys.

Senecio campylocarpus (Bulging Fireweed): A single plant was seen in 2024 not far from the Stud Rd fence at the Bergins Rd intersection.

Rare and threatened in metro Melbourne

Amphibromus archeri (Pointed Swamp Wallaby-grass): A solitary plant was found in 2002, in the Swampy Woodland, roughly 30 m from the Stud Rd fence, opposite the Bergins Rd intersection. This is a 'boom and bust' species that appears only sporadically in most of its sites, particularly after fire. The non-detection in the 2024 site inspection is understandable for such a species, bearing in mind the brevity of the visit.

Hookerochloa hookeriana (Hooker Fescue): A solitary plant was seen near the floodway, in 2024.

Eleocharis gracilis (Slender Spike-rush): Fairly abundant in the Swampy Woodland.

Eryngium vesiculosum (Prickfoot): Reported to have been recorded by Geoff Carr, in 1999.

Hypolepis glandulifera (Downy Ground-fern): A solitary plant was found in the trenches in 2002.

Ottelia ovalifolia (Swamp Lily): Reported by Jameson and Rishworth in a 2002 management strategy for the site.

Schoenus tesquorum (Soft Bog-rush): Dominant in parts of the Swampy Woodland.

Locally threatened

Drosera peltata s.l. (a sundew): Abundant in the slashed strips beneath the transmission lines.

Haloragis heterophylla (Varied Raspwort): One extensive patch was found in 2003 next to the Stud Rd fence, since destroyed by herbicide. A smaller patch survived, slightly further from the fence.

Imperata cylindrica (Blady Grass): Reported by Jameson and Rishworth in a 2002 management strategy for the site.

Isolepis fluitans (Floating Club-rush): Abundant in the trenches; also present in the Swampy Woodland.
Isotoma fluviatilis subsp. *australis* (Swamp Isotome): 2 m² was found in the excavations in 2002.
Machaerina arthrophylla (Fine Twig-rush): Two patches were found in 2002 and 2024.
Rytidosperma erianthum (Hill Wallaby-grass): Recorded in substantial numbers in 2012, near the ridgetop.
Rytidosperma geniculatum (Kneed Wallaby-grass): Scattered patches were found on the ridgetop in 2002.

Fauna of special significance

None detected.

Fauna habitat features

- The grassy groundcover provides suitable habitat for lizards, butterfly caterpillars and other invertebrates;
- The boggy ground in the Swampy Woodland provides habitat for 'yabbies', most local species of which are listed as threatened;
- It is possible that butterflies congregate on the ridgetop (which is what many butterflies do on hilltops);
- The trees feed birds, possums and invertebrates, and the invertebrates feed more birds and probably 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).

Endangered Vegetation Types

Valley Heathy Forest and Swampy Woodland are regionally-endangered EVCs. The representations in Site 72 easily meet 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 follows from Appendix 3 of *Victoria's Native Vegetation Management – a Framework for Action* (NRE 2002a) that the site's native vegetation is of at least High conservation significance. This translates to **State** significance under criterion 3.2.3.

Threatened Plants

The site has known habitat for Matted Flax-lily (*Dianella amoena*). That species is listed as Endangered under Commonwealth legislation. Habitat of any such species is treated as a matter of **National** significance under criterion 3.1.2.

The site has a substantial population of the spear-grass, *Austrostipa rudis* subsp. *australis*, which is listed under the *Flora and Fauna Guarantee Act* as Endangered in Victoria. The species also occurs interstate. Any known habitat for such a species meets criterion 3.1.2 for **State** significance.

Similarly, the Bulging Fireweed (*Senecio campylocarpus*) is listed as Endangered in Victoria and it also occurs interstate. Its known habitat (the Swampy Woodland) meets criterion 3.1.2 for **State** significance. Only a single individual could be seen during the peripheral site inspection for this report in 2024 but others may easily have escaped detection.

Pointed Swamp Wallaby-grass (*Amphibromus archeri*) was recorded in the Swampy Woodland in 2002 (see above). Australasian herbaria hold only two specimens of this species collected over the past thirty years from anywhere else in the Southeast Coastal Plain (or Gippsland Plain) biogeographic region. There are additional (but unvouchered) records but most of them are from sites that have since been destroyed. The data indicates that the species is regionally threatened. The habitat for the species in Site 72 (i.e. the Swampy Woodland) meets criterion 3.1.4 for **Regional** significance.

Scores of the locally-threatened plant species listed above have viable populations, thereby meeting criterion 3.1.5 for **Local** significance.

Threats

- **Major threat:** Continuation of the current displacement of nationally-significant vegetation – including species listed as Endangered or Critically Endangered under legislation – by the declared noxious weeds, Gorse (*Ulex europaeus*), Blackberry (*Rubus anglocandicans*) and Bulbil Watsonia (*Watsonia meriana*). There is a legal obligation to control these species that has not been discharged in recent years;

- Displacement of indigenous flora by other species of environmental weeds;
- Human-induced climate change, which is predicted to cause more severe droughts, heatwaves, floods, fires and storms, as well as substantially lower rainfall (particularly in winter). These effects exacerbate the impacts of the environmental weeds. Swampy Woodland is particularly vulnerable to droughts. Eucalypts are also quite vulnerable to drought and the associated falling of water tables;
- Potential further expansion of the electrical infrastructure into the site;
- Loss or decline of plant species whose populations are so small that they are vulnerable to inbreeding, poor reproductive success or chance events.

Strategic planning

- The previous (2010) edition of this report led to this site being covered by Schedule 2 of the Environmental Significance Overlay (ESO2), on the basis of the regionally-endangered EVCs and the site's locally-threatened species that were known at the time. Since 2010, the changes relevant to the applicability of ESO2 are:
  - Three species listed as threatened under Commonwealth or Victorian legislation have been discovered in the site;
  - Rampant declared noxious weeds have come to pose a very serious threat to those threatened species and the rest of the organisms in the regionally-endangered EVCs; and
  - Regrowth of the regionally-endangered EVC, Valley Heathy Forest, has occurred on ground that had been cleared in c. 2006 for expansion of the southern switchyard, leading to a slight expansion of the site delineated here.

  Taking these changes into account, ESO2 remains appropriate. The only strategic planning recommendation is to extend ESO2 to amend its boundary to match the site recognised here;
- The Planning Scheme zoning is Special Use Zone – Schedule 3 (SUZ3) except for the floodway, which is zoned Urban Floodway Zone (UFZ).

Information sources used in this assessment

- An ecological survey by Dr Lorimer for 3½ hours on 7th November 2002 for the first edition of this report. This included:
  - Compilation of lists of indigenous and introduced plant species in each of four parts of the site;
  - Description of the structural and floristic composition of each type of native vegetation;
  - Incidental fauna observations; and
  - Checks for fauna habitat, ecological threats and management issues;
- A brief re-inspection of the Swampy Woodland by Dr Lorimer from the fenceline on 30th November 2003 to seek any cryptic species missed the previous year and check for additional Pointed Swamp Wallaby-grass (*Amphibromus archeri*);
- The 2002 report, *'Habitat and Pest Plant Management Strategy 2002–2007 – Rowville Terminal Station'* by G. Jameson and R. Rishworth for SPI PowerNet (noting that there are inaccuracies in the botanical content);
- Verbal information from Malcolm Warren of SP AusNet in c. 2002 about how the site's vegetation was managed;
- A botanical survey by Dr Lorimer and the Knox Environment Society on 3rd November 2012;
- An inspection of parts of the site visible from publicly-accessible land by Dr Lorimer on 3rd January 2024 and 18th September 2024, compiling lists of wild indigenous plant species for different parts of the site and checking for changes in features relevant to this report compared with pre-existing information;
- A search for records of flora and fauna observations stored in the Atlas of Living Australia, finding only records of common urban birds;
- 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.