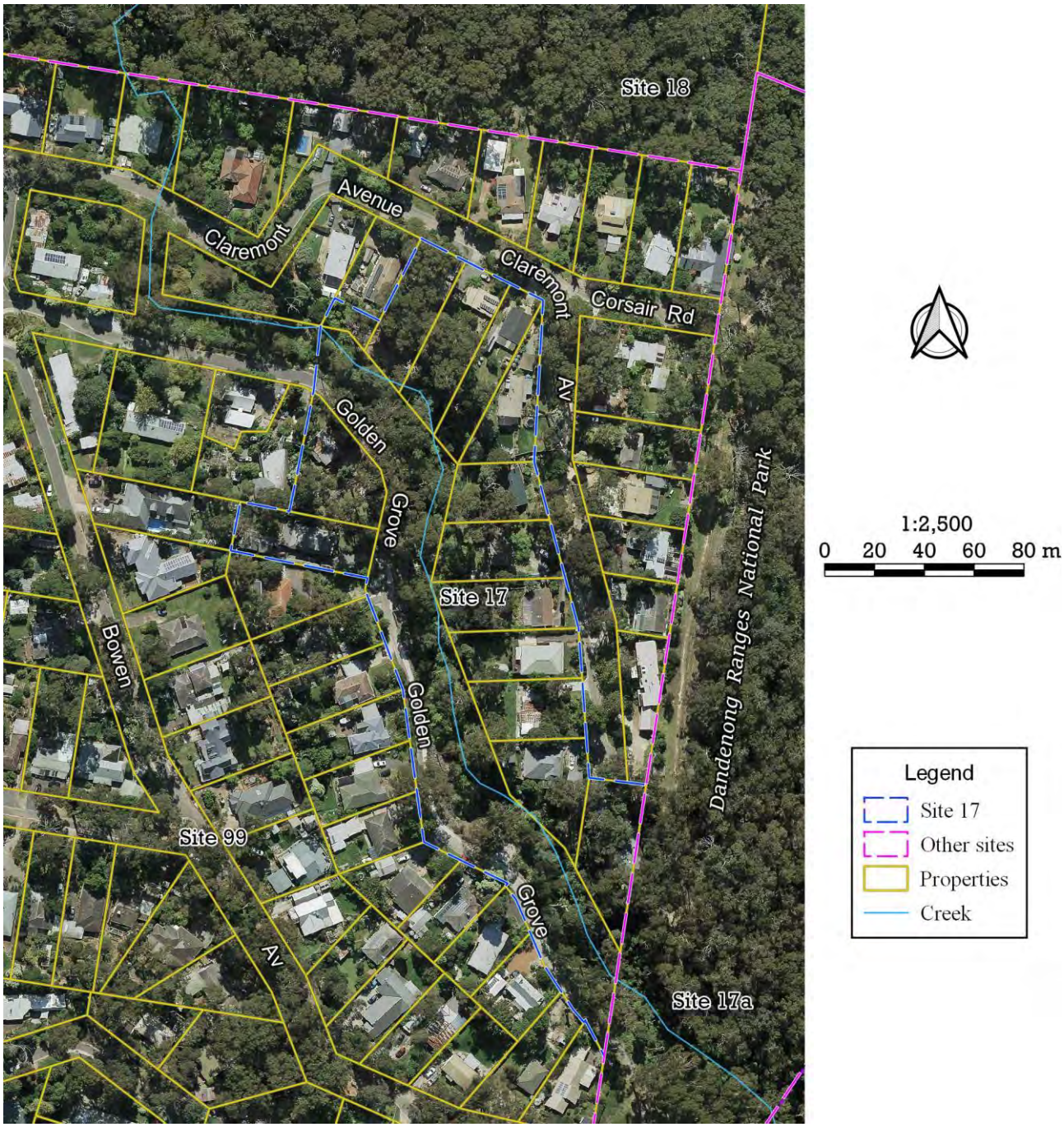
Site 17. 'The Ravine', The Basin

A steep-sided fern gully approaching rainforest, flanked by variably-intact, very tall 'Damp Forest'.

Summary of significant features:

- Regionally significant: apparently high-quality habitat for the listed vulnerable species, Powerful Owl, which is known to roost and breed in close proximity;
- Locally significant: viable populations of many plant species that are threatened with dying out in Knox;
- Locally significant: a moderately-intact patch of a vegetation type not listed as threatened;
- Locally significant: riparian (streamside) vegetation in fairly good ecological condition;
- Locally significant: minor supplementation of the flora and fauna habitat of the abutting Dandenong Ranges National Park;
- Some very large eucalypts and tree-ferns, some of the latter perhaps 200 years old.



Boundaries

This 2.3-hectare site is outlined with blue dashes on the aerial photograph above. Its boundaries coincide with property boundaries except for a line through 68 Claremont Av and a nearby line across Golden Grove.

Compared with the previous (2010) edition of this report, the boundary in the northwest has been changed to move part of 68 Claremont Av and the abutting section of gully from Site 99 into Site 17. That is because the condition and diversity of native vegetation there has improved enough to warrant higher recognition than Site 99 provides.

Note: Permission was not obtained to enter the private properties for this edition, so they were inspected from public land, assisted by aerial photographs. Some native understorey would have gone undetected.

Land use & tenure: Residential land zoned 'Low Density Residential Zone' (LDRZ) and a reserve zoned Public Park and Recreation Zone (PPRZ) for Golden Grove and the adjacent creek.

Site description

This site follows a corridor of tall Damp Forest flanking a fern gully along a perennial tributary of Dobson Creek, at elevations of 201–229 m. The valley has historically been known as The Ravine[*]. The creek has carved a steep-sided channel several metres deep (hardly a true ravine), and Golden Grove has been constructed on the western bank, raised above the natural ground level. Above the eastern bank, the hillside has a slope of almost 30%, facing west. The slope west of Golden Grove faces north and is much shallower, at 10%.

The soil in the lowest few metres of the gully cross-section is alluvium washed down by the creek. In the rest of the site, the soil is an acidic, orange clay loam derived from the Ferny Creek rhyodacite formation, which is the uppermost volcanic stratum of the Dandenong Ranges.

The site has a history of excavation, clearing, road construction, residential development, drainage works, gardening and prolific colonisation by introduced plants. Despite that, the ecological condition of vegetation within the reserve has experienced a net improvement since the previous (2008) ecological survey. There are still around 200 tree-ferns, some of which are very tall and perhaps 200 years old.

Some of the private properties in the site retain remnant trees and some native understorey. Some others retain only a few remnant trees. Some harbour serious environmental weeds.

In the reserve and on some of the private properties on the eastern side, there are many plant species that are threatened with dying out in Knox. Some (but not all) of those species are not particularly threatened in the Dandenong Ranges outside Knox. The same applies to the Damp Forest vegetation type.

The lowest few metres of the gully cross-section are well shaded by the steep creek banks, creating rainforest-like conditions that suit ferns, mosses and liverworts. Rocks, large logs, tree-fern trunks and silt beds provide good substrates for mosses and liverworts. As a result, a highlight of this part of the site is its rich range of species of moss and liverwort – more than the number of indigenous flowering species in the whole site. Many of those species are mostly found in rainforest and had not been discovered in Knox before this study's survey in 2023. Many of the same species were discovered on the same day immediately upstream in the national park. Some have not been recorded before in the Dandenong Ranges or not for over 120 years. The presence of so many species that are not known elsewhere in Knox makes The Ravine and Site 17a important sites for conserving the municipality's biodiversity.

While the standard criteria for rating sites of biological significance only recognise the site as having features of Local to Regional significance, the rare mosses and liverworts and the tall tree-ferns mean the site makes a greater contribution to Knox's biodiversity and natural heritage than most sites of State or National significance.

As is common in wet gullies, some the most impactful environmental weeds are creepers or climbers, e.g. Cape Ivy, Ivy, Wandering Trad and Garden Selaginella. The last of these appears to have emanated from the historical 'Ferndale' estate that is now part of the national park.

[*] *'Fire on the Hill, Flowers in the Valley – The Basin, 1868–1992'* by Rick Coxhill, published by The Basin Progress Association, 1992.

Relationship to other land

The Dandenong Ranges National Park, immediately east of this site, is of high National significance for its native vegetation and wildlife. Its presence greatly increases the security of the flora in the reserve, because seeds and pollen from the park no doubt enter the reserve and hence prevent inbreeding of flora. Extensive movement of fauna was observed between the site and the park.

The national park's environmental weeds are less dense than along Golden Grove but they still represent a large reservoir of seeds and fragments to migrate down the creek into Site 17. Any weed control work in Site 17 would benefit greatly from complementary weed control work in the national park to reduce the rate of re-establishment. Conversely, environmental weeds with seeds dispersed by birds, such as Sweet Pittosporums and Cestrum, are presently migrating in both directions, so any weed control work in the national park would benefit from complementary work along Golden Grove and the surrounding private properties.

The part of the national park that abuts this site is Site 17a and the whole of the surrounding residential area is included in Site 99 (the Dandenong Ranges Buffer area).

Bioregion: Highlands Southern Fall

Habitat types

A strip typically 20 m wide along the creek has the typical, distinctive vegetation of a cool-temperate fern gully of southeastern Australia. Unfortunately, the Victorian Government has not designated an EVC for that vegetation type, instead leaving it to be lumped with surrounding forest types such as Cool Temperate Rainforest or – in this case – Damp Forest. Fern gully vegetation is treated separately here:

Fern gully (no EVC recognised): 0.5 ha, roughly equally divided between good ecological condition (rating B) and fair ecological condition (rating C). Characterised by the dense cover of tree-ferns over abundant lower ferns, and that there are more bryophyte species (mosses and liverworts) than indigenous seed-producing species.

Dominant canopy trees: *Acacia melanoxylon*, *Pomaderris aspera* and the tree-ferns, *Dicksonia antarctica* and *Cyathea australis*. *Olearia argophylla* is scarce. Eucalypts overhang from the adjacent Damp Forest but only outlier trunks grow in the fern gully.

Shrubs: *Coprosma quadrifida* is scattered where enough light penetrates the tree-ferns and trees.

Vines: *Calystegia marginata*, *Clematis aristata* and *Pandorea pandorana*. There is also the climbing grass, *Tetrarrhena juncea*, where there are gaps in the canopy.

Understorey ferns: Very abundant, including *Blechnum cartilagineum, Blechnum nudum, Calochlaena dubia, Hypolepis glandulifera, Hypolepis rugosula* and a few *Histiopteris incisa* and *Lastreopsis acuminata*.

Mosses and liverworts: Abundant, particularly on logs, rocks, tree-fern trunks and steep clay surfaces. No fewer than 34 species were recorded during the author's non-exhaustive survey in 2023, with several of those species not previously recorded in Knox. Characteristic moss species include *Achrophyllum dentatum, Austrothamnium pumilum, Camptochaete deflexa, Cyathophorum bulbosum, Fissidens tenellus, Hypnodendron spininervium, Hypnodendron vitiense, Hypopterygium didictyon, Lembophyllum clandestinum* and *Plagiothecium lamprostachys*. Characteristic liverwort species include *Metzgeria furcata, Radula buccinifera*, multiple *Heteroscyphus* species and an unidentified *Lepidozia*.

Other groundcover: Sparse and with few species. The introduced *Tradescantia albiflora* and *Selaginella kraussiana* are perhaps the most abundant species. The indigenous species include *Australina pusilla* subsp. *muelleri, Hackelia latifolia, Hydrocotyle geraniifolia, Isolepis inundata, Sambucus gaudichaudiana* and *Persicaria decipiens*.

Damp Forest (EVC 29, conservation status listed as of 'Least Concern' in the bioregion): 1.4 ha, of which approximately 10% (0.4 ha) is in fair ecological condition (rating C) and the remainder (1.26 ha) is in poor ecological condition (rating D).

Dominant canopy trees: *Eucalyptus cypellocarpa* with a few *E. obliqua* and a recently-dead *E. radiata*. Some trees are very large.

Sub-canopy trees: *Acacia melanoxylon* and *Pomaderris aspera* are abundant. *Acacia dealbata* is also conspicuous. The characteristic species *Bedfordia arborescens* and *Olearia argophylla* are present but scarce.

Shrubs: Clearing and the effects of environmental weeds have reduced the indigenous shrubs to very sparse *Coprosma quadrifida, Ozothamnus ferrugineus, Pimelea axiflora* and *Sigesbeckia orientalis*.

Vines: Introduced vines are very abundant, dominated by *Delairea odorata, Hedera helix* and *Passiflora mollissima*. Indigenous vines are represented by *Clematis aristata, Pandorea pandorana* and a solitary *Calystegia marginata*. There is also the climbing grass, *Tetrarrhena juncea*.

Ferns: Very abundant, dominated by *Cyathea australis* and *Calochlaena dubia*, and with many *Dicksonia antarctica, Adiantum aethiopicum* and *Blechnum cartilagineum*.

Other groundcover: Low in species-richness. Dominated by the environmental weeds *Tradescantia albiflora* and *Delairea odorata*. The dominant indigenous species is the grass, *Poa ensiformis*, followed by *Tetrarrhena juncea*.

Plant species

The list below shows plant species that were seen during the author's botanical surveys of The Ravine in December 1997, May 2002, March 2008 and May–July 2023. Species that were not seen in 2023 are indicated by their names being followed by the year when they were seen. No additional species appear in the Atlas of Living Australia. The column headed 'Risk' indicates the species' risk of dying out in Knox as follows: 'C'=Critically Endangered; 'E'=Endangered; and 'V'=Vulnerable.

Risk	Wild indigenous species
	Liverworts
	Chiloscyphus semiteres, Green Worms
	Heteroscyphus argutus, Crestwort
	Heteroscyphus coalitus, Crestwort
	Heteroscyphus fissistipus, Crestwort
	Lepidozia sp., a liverwort
	Lunularia cruciata, Moonwort
	Metzgeria furcata, a liverwort
	Radula buccinifera, a liverwort
	Mosses
	Achrophyllum dentatum, a moss
	Atrichum androgynum, a moss
	Austrothamnium pumilum, a moss
	Camptochaete deflexa, a moss
	Campylopus ?*clavatus*, Broody Swan-neck Moss
	Campylopus introflexus, Heath Star Moss
	Cyathophorum bulbosum, Caterpillar Moss
	Eurhynchium praelongum, Common Feather-moss
	Fissidens asplenioides, a pocket-moss
	Fissidens curvatus, a pocket-moss
	Fissidens leptocladus, a pocket-moss
	Fissidens tenellus, a pocket-moss
	Hypnodendron spininervium subsp. *archeri*, Umbrella Moss
	Hypnodendron vitiense subsp. *australe*, Umbrella Moss
	Hypnum cupressiforme, Common Hypnum
	Hypopterygium didictyon, a moss
	Lembophyllum clandestinum, a moss
	Orthodontium lineare, Cape Thread-moss
	Plagiothecium lamprostachys, a moss
	Ptychomnion aciculare, Paper Moss, Pipe-cleaners
	Racopilum cuspidigerum var. *convolutaceum*, a moss
	Rhizogonium distichum, a moss
	Rosulabryum billarderi, Common Thread-moss
	Thuidiopsis ?*sparsa*, a weft-moss
	Wijkia extenuata, Spear Moss
	Ferns
V	*Adiantum aethiopicum*, Common Maidenhair (2002)
E	*Blechnum cartilagineum*, Gristle Fern
V	*Blechnum nudum*, Fishbone Water-fern
V	*Calochlaena dubia*, Common Ground-fern
C	*Cyathea australis*, Rough Tree-fern
C	*Dicksonia antarctica*, Soft Tree-fern
C	*Histiopteris incisa*, Bat's Wing Fern (2008)
C	*Hypolepis glandulifera*, Downy Ground-fern
C	*Hypolepis rugosula*, Ruddy Ground-fern
C	*Lastreopsis acuminata*, Shiny Shield-fern
	Pteridium esculentum, Austral Bracken
	Pteris tremula, Tender Brake
	Flowering species
	Acacia dealbata, Silver Wattle
V	*Acacia melanoxylon*, Blackwood
	Acaena novae-zelandiae, Bidgee-widgee
E	*Australina pusilla* subsp. *muelleri*, Shade Nettle
C	*Bedfordia arborescens*, Blanket-leaf (2002)
E	*Calystegia marginata*, Forest Bindweed
	Carex appressa, Tall Sedge
V	*Clematis aristata*, Mountain Clematis
V	*Coprosma quadrifida*, Prickly Currant-bush
	Dianella tasmanica, Tasman Flax-lily (1997)
	Dichondra repens, Kidney-weed
V	*Eucalyptus cypellocarpa*, Mountain Grey Gum
E	*Eucalyptus obliqua*, Messmate Stringybark
E	*Eucalyptus radiata*, Narrow-leaved Peppermint (the last one died c. 2022)
C	*Gahnia radula*, Thatch Saw-sedge (1997)
E	*Galium* ?*gaudichaudii*, Rough Bedstraw
	Geranium homeanum, Rainforest Crane's-bill

Risk	Wild indigenous species
V	*Gonocarpus humilis*, Shade Raspwort
	Goodenia ovata, Hop Goodenia
E	*Hackelia latifolia*, Forest Hound's-tongue
E	*Hydrocotyle geraniifolia*, Forest Pennywort
V	*Hydrocotyle hirta*, Hairy Pennywort
	Isolepis inundata, Swamp Club-rush
E	*Juncus procerus*, Tall Rush (2002)
	Lepidosperma elatius, Tall Sword-sedge (2002)
	Microlaena stipoides, Weeping Grass
E	*Olearia argophylla*, Musk Daisy-bush
E	*Olearia lirata*, Snowy Daisy-bush
	Oxalis exilis/perennans, Wood-sorrel
V	*Ozothamnus ferrugineus*, Tree Everlasting
	Pandorea pandorana, Wonga Vine
	Persicaria decipiens, Slender Knotweed
C	*Pimelea axiflora*, Bootlace Bush (2002)
	Poa ensiformis, Sword Tussock-grass
V	*Polyscias sambucifolia*, Elderberry Panax
V	*Pomaderris aspera*, Hazel Pomaderris
V	*Prostanthera lasianthos*, Victorian Christmas-bush
	Rytidosperma racemosum, Clustered Wallaby-grass (1997)
C	*Sambucus gaudichaudiana*, White Elderberry
	Senecio hispidulus, Rough Fireweed (1997)
	Senecio minimus, Shrubby Fireweed
V	*Sigesbeckia orientalis*, Indian Weed
C	*Stellaria flaccida*, Forest Starwort (2002)
	Tetrarrhena juncea, Forest Wire-grass

Risk	Planted species
V	*Acacia mearnsii*, Black Wattle
E	*Acacia stricta*, Hop Wattle
C	*Eucalyptus viminalis* subsp. *viminalis*, Manna Gum
E	*Gahnia sieberiana*, Red-fruit Saw-sedge
C	*Gastrodia sesamoides*, Cinnamon Bells
C	*Goodia lotifolia*, Common Golden-tip
E	*Polystichum proliferum*, Mother Shield-fern

Risk	Planted species
	Dianella tasmanica, Tasman Flax-lily
E	*Eleocharis gracilis*, Slender Spike-rush
E	*Gahnia sieberiana*, Red-fruit Saw-sedge
C	*Goodia lotifolia*, Common Golden-tip
E	*Gynatrix pulchella*, Hemp Bush
C	*Melaleuca squarrosa*, Scented Paperbark
E	*Olearia argophylla*, Musk Daisy-bush
C	*Pittosporum bicolor*, Banyalla
V	*Solanum laciniatum*, Large Kangaroo Apple

Wild introduced species
Allium triquetrum, Angled Onion (2002)
Asparagus scandens, Asparagus Fern (2002)
Cenchrus clandestinus, Kikuyu (2002)
Cestrum elegans, Red Cestrum (2002)
Cestrum sp., a Cestrum (1997)
Coprosma repens, Mirror-bush (2002)
Coprosma robusta, Karamu
Cortaderia selloana, Pampas Grass (1997)
Cotoneaster glaucophyllus, Cotoneaster (1997)
Crocosmia × *crocosmiiflora*, Montbretia (2002)
Dactylis glomerata, Cocksfoot (2002)
Delairea odorata, Cape Ivy
Ehrharta erecta, Panic Veldt-grass (2002)
Hedera helix/hibernica, Ivy
Hypericum androsaemum, Tutsan
Hypericum tetrapterum, Square-stem St John's Wort
Jasminum polyanthum, Pink (or Winter) Jasmine (2002)
Lonicera japonica, Japanese Honeysuckle (1997)
Oxalis incarnata, Pale Wood-sorrel (2002)
Passiflora tarminiana, Banana Passionfruit (2002)
Pittosporum undulatum, Sweet Pittosporum
Prunus laurocerasus, Cherry Laurel (1997)
Ranunculus repens, Creeping Buttercup (2002)
Rubus anglocandicans, Blackberry
Selaginella kraussiana, Garden Selaginella
Tradescantia fluminensis, Wandering Trad
Zantedeschia aethiopica, White Arum Lily (2002)

Notes concerning some of the locally-threatened plant species

Bedfordia arborescens (Blanket-leaf) – Scarce when last seen (2002); still scarce just upstream in the national park.

Blechnum cartilagineum (Gristle Fern) – In a cluster on the boundary between this site and the national park, at least three are on the side of this site; exact number uncertain due to lack of a marked boundary.

Blechnum nudum (Fishbone Water-fern) – At least two, first found on 10/3/08 following weed removal.

Calystegia marginata (Forest Bindweed) – Fairly abundant in 2023 but numbers vary greatly over the years; Not seen in 1997 and only a solitary plant in 2002.

Cyathea australis (Rough Tree-fern) – 107 were counted in 2023, some of the very tall, perhaps as old as colonisation of The Basin.

Dicksonia antarctica (Soft Tree-fern) – 57 were counted in 2023, some of them very tall and as old as colonisation of The Basin.

Eucalyptus radiata (Narrow-leaved Peppermint) – The last one died in c. 2022, having been affected by drainage works within the gully.

Hydrocotyle geraniifolia (Forest Pennywort) – Three were seen in 2023; not seen in 1997 or 2002; a solitary individual seen on 10/3/08.

Olearia argophylla (Musk Daisy-bush) – Very scarce in 2002; the only one seen in 2023 was planted there.

Pimelea axiflora (Bootlace Bush) – Seen in 1997 and 2002 but not in 2023.

Sigesbeckia orientalis (Indian Weed) – A boom-and-bust species: fairly abundant in 2023 but only one was seen in prior surveys.

Stellaria flaccida (Forest Starwort) – Formerly growing densely on the fence at 10 Golden Grove but not visible in 2008 or 2023.

Fauna of special significance

Because of the proximity to the Dandenong Ranges National Park, the site is bound to be regularly visited by various rare or threatened fauna from the park. That includes the Powerful Owl that the author observed less than ½ km from the site in August 2023, in the middle of breeding season. The site provides a small extension to the native habitat available for such species.

Fauna habitat features

- There are very large eucalypts with hollows that provide suitable roosting or nesting sites for certain fauna;
- The fern gully provides perennial water and a refuge for fauna during extreme heat and drought;
- The stream may provide habitat for important fauna, based on the presence of the rare Dandenong Freshwater Amphipod nearby on Dobson Creek and many records of four threatened species of crays in the vicinity. No invertebrate survey has been done to check.

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

Criterion 1.1.1 attributes **Local** significance to 'All parts of riparian systems with riparian vegetation present', which applies to this site. Criterion 1.2.6 might also be taken to accord Local significance to the site as 'Important at local scale - Link between individual remnant habitat blocks or within subcatchment'.

Some of the site is part of an area of over 100 ha of contiguous, intact native vegetation on the western slopes of the Dandenong Ranges, within an otherwise heavily fragmented landscape. This represents at least **Local** significance under criterion 1.1.2.

Vegetation Type and Condition

Appendix 3 of *Victoria's Native Vegetation Management – a Framework for Action* (NRE 2002a) states that a patch of vegetation of an EVC rated as 'Least Concern' (as in this case) is of either Medium or Low conservation significance, depending on whether the habitat score is above or below 0.6. No habitat score has been determined in this site but it seems likely that it would be below 0.6 throughout because the fern gully has to be assessed against the Damp Forest benchmark. If the score is indeed below 0.6, the Framework document prescribes 'Low' conservation significance, which translates to **Local** significance under criterion 3.2.3 of Amos (2004).

If the site's significance rating were to become an important issue, the habitat score of the best native vegetation would have to be determined by fieldwork to see whether it really is below the threshold of 0.6.

Threatened Plants

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

Threatened Fauna

The Powerful Owl is listed as a vulnerable species in Victoria. The author observed one roosting less than ½ km from the site in August 2023, in the middle of breeding season. The vegetation in The Ravine seems to be

high-quality habitat for Powerful Owls. Such circumstances represent **Regional** significance under criterion 3.1.3.

Threats

- Displacement of indigenous flora and fauna by environmental weeds such as Sweet Pittosporum, Cape Ivy, Ivy, Wandering Trad and Garden Selaginella;
- Damage to vegetation, fauna habitat and stream banks by periodic roadworks and drainage works;
- Damage to vegetation, fauna habitat and stream banks by deer, whose numbers are rapidly increasing;
- Ongoing removal or mowing of native vegetation beside the creek (in the reserve) by neighbours seeking easy access to the creek;
- 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). Lower stream flow and a falling water table are of particular concern for this site's natural assets;
- Loss or decline of plant species that are present in such precariously small numbers that they are vulnerable to inbreeding, poor reproductive success or vulnerability to the threats above or localised chance events such as being struck by a falling tree limb;
- Potential demands for increased fire prevention measures, arising from climate change and consequent increases in climatic fire risk.

Management

- The combination of occasional floods and a huge reservoir of weed seeds around the site means that environmental weeds will tend to recolonise the site fairly quickly after weed control work. Nevertheless, this should not discourage putting some effort into controlling the most impactful, most tractable weeds. For example, it is desirable to periodically cut the climbing stems of the most vigorous vine weeds before they smother their host plants, even though this will not kill the weeds. The most significant indigenous species of plants should receive highest priority for being freed of vine weeds.

Strategic planning

- The previous (2010) edition of this report led to its slightly smaller version of Site 17 being covered by Schedule 2 of the Environmental Significance Overlay (ESO2). That edition cited the same matters of biological significance as above except for the (subsequent) detection of nearby Powerful Owl breeding. The other changes that have occurred are: (a) detection of many locally-rare mosses and liverworts; (b) an apparent improvement in the ecological condition of the fern gully vegetation; (c) removal of some mature eucalypts (notably at 76 Claremont Av), compensated by growth of surviving eucalypts; (d) replacement of some low-grade native groundcover by vegetated stormwater treatment wetlands; and (e) the enlargement of the site in this edition to add part of 68 Claremont Av and the abutting section of gully. Despite these changes, ESO2 remains an appropriate protective instrument for the expanded Site 17. While not urgent, it is recommended to adjust the boundary between ESO2 and ESO3 to match this new version of Site 17;
- The whole site is covered by Schedule 2 of the Significant Landscape Overlay (SLO2), Schedule 1 of the Design and Development Overlay (DDO1) and the Bushfire Management Overlay (BMO);
- The private lots within this site are all smaller than 0.4 ha and therefore exempt from the state-wide baseline planning controls over removal of native vegetation (clause 52.17). The reserve is not exempt;
- The reserve for the road and creek is zoned 'Public Park and Recreation Zone' and the private land is zoned 'Low Density Residential Zone';
- The whole site is within the Urban Growth Boundary.

Information sources used in this assessment

- A vegetation survey of the public land within the site by Dr Lorimer on 23–24/12/97 for *'A Survey and Management Strategy for Significant Roadside Vegetation in Knox'* (published by Knox City Council in May 1998). This included compilation of lists of flora and fauna species;
- An ecological survey undertaken for the first edition of this report by Dr Lorimer on 31/5/02. This included a description of the vegetation composition, compilation of lists of indigenous and introduced plant species, incidental fauna observations, and checks for fauna habitat, ecological threats and management issues;
- A brief reinspection of the site by Dr Lorimer on 10/3/08 to update the site analysis for the second edition, finding several additional plant species;

- A detailed vegetation survey by Dr Lorimer in May–June 2023 for this edition;
- Records of flora observations stored in the Atlas of Living Australia (most of which are of planted plants, though not flagged as such);
- The Victorian Government's 'NatureKit' website;
- Aerial and satellite imagery from between 1946 and 2024;
- Maps of geology, topography and strategic planning information produced by agencies of the Victorian Government.