Site 99. Dandenong Ranges Buffer

The treed, mainly residential area at the foot of the Dandenong Ranges. Melway maps 65 and 74.

Site Significance Level: *Local*

- There are large numbers of mature, indigenous eucalypts, forming a canopy that is somewhat fragmented but which supports rich bird life, including regionally uncommon species such as Australian King-Parrots in abundance;
- There are many small populations of locally threatened plant species, particularly on roadsides.

Map – see next page

Boundaries

The 998 ha site is the green area on the map and does not include the other coloured and numbered sites shown within its outline. The outline follows property boundaries and the municipal boundary, except where it crosses roads.

Land use & tenure: Mainly residential land and parks.

Site Description

This site abuts the Dandenong Ranges National Park and many other identified sites of biological significance, and it has more than a dozen other sites of biological significance embedded within it. It also has a higher density of large trees than the rest of Knox, including remnant indigenous trees. These characteristics result in extensive dispersal of native birds, insects, pollen and seeds through the area. This dispersal is important for the landscape-scale maintenance of biodiversity in the area, e.g. by:

- Facilitating exchange of species and genetic material of native flora and fauna, particularly between the more isolated sites of biological significance covered by Schedule 1 of the Environmental Significance Overlay, thereby ameliorating the risks of inbreeding, decline in biodiversity and consequent vulnerability to other causes of ecological degradation;
- Allowing fauna to migrate around the landscape to fulfil their various habitat needs, such as for dispersal of young animals ejected from parental ranges, or in search of seasonal food sources in different parts of the landscape;
- To facilitate re-establishment of populations of species at sites from which they have disappeared, e.g. the successful reintroduction program for the Sword-grass Brown Butterfly in Boronia, run by the Knox Environment Society and Knox City Council.

The tree canopy and shrubs that occur along the many creeks and drainage lines that flow through the area are important for maintaining the aquatic ecosystems and water quality.

The presence of the vegetation and the associated wildlife (particularly birds) adds greatly to the amenity and character of the area.

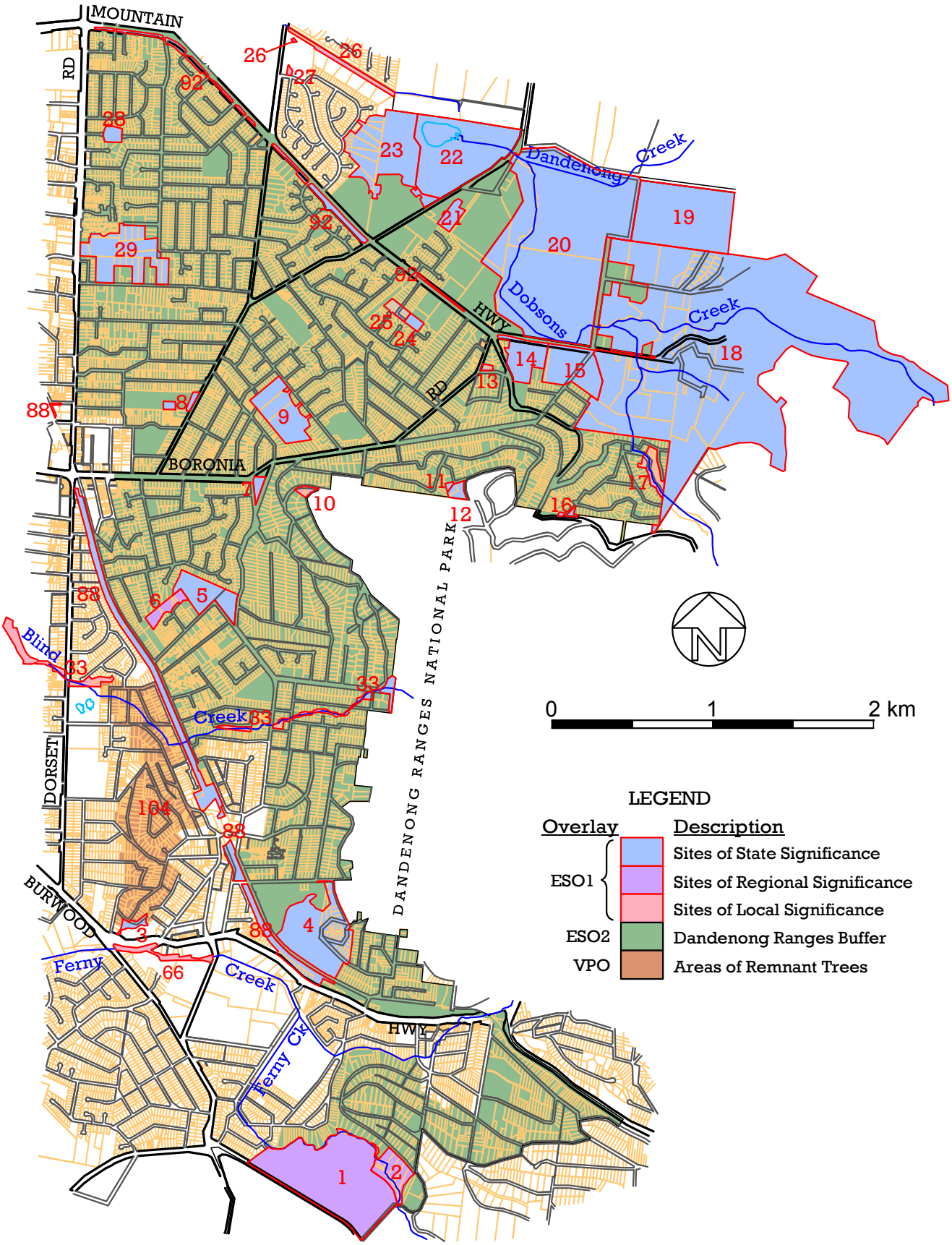
In these ways, this site plays an important role as an ecological buffer zone and for providing ecosystem services, even though it is not of great biological significance when one views a small part of it in isolation from the whole.

The area has scattered patches of native understorey vegetation, particularly on roadsides. Most of the remnant native vegetation belongs to, or is derived from, Ecological Vegetation Classes (EVCs) that are regionally Endangered or Vulnerable. There are localised, mostly very small populations of numerous plant species that are rare or threatened in Knox or the Melbourne area generally, including six species that are Critically Endangered in Knox. There are also significant fauna species such as Powerful Owl and abundant Australian King-Parrot.

The area is overwhelmingly residential and there may be undetected significant habitat or species among the many hundreds of properties.

However, many properties have few if any features of biological significance other than as a buffer for more significant vegetation, as described above. These properties are included within the site to:

- Provide a consistent, basic level of protection for the ecological buffering that the area provides; and
- Provide control over development or vegetation removal that may impair this buffering function, even when these activities occur on land that has no environmental significance when considered in isolation from the surroundings.



Map showing Site 99 – the Dandenong Ranges Buffer – in green, and other numbered sites in colours according to their conservation significance.

Relationship to other land

As seen from the map, this site has many other, more significant sites embedded within it. It also borders the Dandenong Ranges National Park and the Glenfern Valley Bushlands. Native wildlife (particularly birds, bats, insects and frogs) must move through this site to get from one of the embedded sites to another, or between them and the national park or the Glenfern Valley Bushlands. Such movements through the site allow dispersal of fauna and pollen between all these sites. For example, young Powerful Owls that were bred in the national park are sometimes observed in Koolunga Native Reserve (Site 5) and are likely to hunt in treed areas anywhere within the Dandenong Ranges Buffer. Similarly, the regionally uncommon Australian King-Parrot is abundant around The Basin, even at the shopping centre, because the treed landscape entices them out of their core habitat in the Dandenong Ranges National Park.

Without such a treed landscape, the more ecologically sensitive wildlife would cease to move through the area. As a result, pollen would not be as well dispersed, leading to plant inbreeding, reproductive failure and steady loss of native vegetation and habitat, even in the core areas such as Koolunga Native Reserve. The rich birdlife enjoyed by residents would be reduced to just hardy urban birds such as Common Mynas, Spotted Turtle-Doves, Little Ravens and Red Wattlebirds.

Bioregion: Gippsland Plain and Highlands Southern Fall, as mapped at the start of Section 3 of Volume 1.

Habitat types

The following is a list of the Ecological Vegetation Classes represented in the site, but some of them may be only represented by vestiges of the pre-European vegetation (typically just remnant trees and hardy ground flora in parks and residential gardens). For this reason, and because most private properties could not be inspected, no figures are quoted for the number of plant species in each EVC, nor the size of area within each EVC and in each ecological condition rating.

Riparian Forest (EVC 18, **Vulnerable** in the Gippsland Plain bioregion) along Ferny Ck in Upper Ferntree Gully, identifiable by the canopy of Manna Gums (*Eucalyptus viminalis*).

Grassy Dry Forest (EVC 22, conservation status rated 'Least Concern' in the Highlands Southern Fall bioregion) in the most elevated parts of The Basin, Boronia and Ferntree Gully.

Herb-rich Foothill Forest (EVC 23, conservation status rated 'Least Concern' in the Highlands Southern Fall bioregion) in the Claremont Av estate of The Basin and on the slopes of Upper Ferntree Gully that face approximately southward.

Swampy Riparian Woodland (EVC 83, **regionally Endangered**) along Upwey Ck and Ferny Ck.

Valley Heathy Forest (EVC 127, **regionally Endangered**) on the undulating terrain to the west of the Dandenong Ranges geological formation, including most of Boronia.

Grassy Forest (EVC 128, **regionally Vulnerable**) along the mid-slope of the western face of the Dandenong Ranges and on slopes and hills in Upper Ferntree Gully that do not support Herb-rich Foothill Forest.

Swampy Woodland (EVC 937, **regionally Endangered**) on alluvial deposits across the site, usually identifiable by pure stands of *Eucalyptus ovata*.

Plant species

The following plant species were observed by the author in the years indicated, except that the two 1985 records belong to Mr A. Paget. Because only part of the site could be inspected, the following list should not be treated as comprehensive. The column headed 'Risk' indicates the indigenous species' risk of extinction in Knox as follows: 'C'=Critically Endangered; 'E'=Endangered; and 'V'=Vulnerable. In addition, *Acacia leprosa* (Dandenong Range variant) is rare nationally and the species with names in bold are rare in the Melbourne region.

Risk	Indigenous Species	Year
	Acacia dealbata	2003
V	*Acacia implexa*	1997
V	***Acacia leprosa* (Dandenong Range variant)**	1997
V	*Acacia melanoxylon*	2003
E	*Acacia mucronata*	1997
E	*Acacia myrtifolia*	2002
E	*Acacia pycnantha*	2002
E	*Acacia stricta*	2003
V	*Acacia verticillata*	2003
V	*Acaena echinata*	1997
	Acaena novae-zelandiae	2003
V	*Acrotriche prostrata*	2002
	Acrotriche serrulata	1997
V	*Adiantum aethiopicum*	1997
C	*Amyema pendula*	1997
C	*Arthropodium milleflorum* s.l.	1997
	Arthropodium strictum	1997
C	*Asperula conferta*	1997
	Austrostipa pubinodis	1997
	Austrostipa rudis	2002
	Austrostipa rudis subsp. *rudis*	2003
C	***Bedfordia arborescens***	1997
	Billardiera mutabilis	1997
E	***Blechnum cartilagineum***	1997
	Bossiæa prostrata	1997

Risk	Indigenous Species	Year
V	*Brunonia australis*	1997
E	*Bulbine bulbosa*	1997
	Burchardia umbellata	1997
	Bursaria spinosa	2003
V	*Caesia parviflora*	1997
V	*Calochlaena dubia*	2003
	Carex breviculmis	1997
	Cassinia aculeata	1997
	Cassinia arcuata	1997
V	*Cassinia longifolia*	1997
E	*Cassytha melantha*	1997
E	*Cassytha pubescens*	1997
E	*Centella cordifolia*	1997
C	*Cheilanthes austrotenuifolia*	1997
V	*Chiloglottis valida*	1997
V	*Clematis aristata*	1997
V	*Coprosma quadrifida*	2003
E	*Correa reflexa*	1997
E	*Cyathea australis*	1997
E	*Cynoglossum suaveolens*	1997
E	*Daviesia leptophylla*	1997
E	*Desmodium gunnii*	1997
	Deyeuxia quadriseta	1997
	Dianella admixta	2002
V	*Dianella longifolia* s.l.	2003
V	*Dianella tasmanica*	2003
C	*Dichelachne crinita*	1997
	Dichelachne rara	1997
	Dichondra repens	2002
V	*Dillwynia cinerascens*	1997
E	*Dipodium roseum*	1997
V	*Drosera peltata* subsp. *auriculata*	1997
	Elymus scaber	1997
V	*Epacris impressa*	1997
V	*Epilobium billardierianum* ssp. *cinereum*	2003
	Epilobium hirtigerum	1997
V	*Eucalyptus cephalocarpa*	2002
V	*Eucalyptus cypellocarpa*	2003
	Eucalyptus goniocalyx	2003
E	*Eucalyptus macrorhyncha*	1997
V	*Eucalyptus melliodora*	1997
V	*Eucalyptus obliqua*	2003
V	*Eucalyptus ovata*	2003
E	*Eucalyptus radiata*	2003
E	*Eucalyptus viminalis* subsp. *viminalis*	2003
V	*Euchiton collinus*	1997
E	*Euchiton involucratus*	1997
V	*Exocarpos cupressiformis*	2003
E	*Exocarpos strictus*	1997
	Gahnia radula	2002
V	*Geranium potentilloides*	2003
V	*Glycine clandestina*	1997
	Gonocarpus tetragynus	1997
	Goodenia lanata	1997
	Goodenia ovata	2003
C	*Hakea ulicina*	1997
V	*Hardenbergia violacea*	1997
V	*Helichrysum scorpioides*	1997
E	*Hibbertia riparia*	1997
E	*Hypericum gramineum*	1997

Risk	Indigenous Species	Year
E	*Indigofera australis*	1997
	Juncus amabilis	1997
	Juncus gregiflorus	1997
	Juncus pallidus	1997
E	*Juncus planifolius*	1997
	Juncus sarophorus	1997
E	*Juncus subsecundus*	1997
C	***Juncus vaginatus***	1997
	Kunzea ericoides spp. agg.	2003
C	*Lachnagrostis aemula* s.l.	1997
	Lachnagrostis filiformis	1997
	Lepidosperma elatius	1997
V	*Lepidosperma laterale*	1997
	Leptospermum continentale	2002
E	*Linum marginale*	1997
	Lomandra filiformis subsp. *coriacea*	2002
	Lomandra filiformis subsp. *filiformis*	2002
	Lomandra longifolia	2002
V	*Lythrum hyssopifolia*	1997
E	*Melaleuca ericifolia*	1997
	Microlaena stipoides	2003
C	*Muellerina eucalyptoides*	1997
E	***Olearia argophylla***	1997
V	*Olearia lirata*	1997
E	*Olearia myrsinoides*	2002
V	*Opercularia varia*	1997
	Oxalis exilis/perennans	1997
E	*Ozothamnus ferrugineus*	2003
	Pandorea pandorana	2003
E	*Phragmites australis*	2002
C	***Pimelea axiflora***	1997
E	*Pimelea curviflora*	1997
V	*Pimelea humilis*	1997
V	*Plantago varia*	1997
V	*Platylobium formosum*	1997
V	*Platylobium obtusangulum*	2002
	Poa ensiformis	2003
	Poa morrisii	1997
E	*Poa tenera*	1997
E	*Polyscias sambucifolia*	1997
E	***Polystichum proliferum***	1997
E	*Pomaderris aspera*	1997
	Poranthera microphylla	1997
E	*Prostanthera lasianthos*	1997
	Pteridium esculentum	2003
E	*Pterostylis melagramma*	1985
V	*Pultenaea gunnii*	1997
C	*Pultenaea scabra*	1997
E	*Rubus parvifolius*	2003
V	*Rytidosperma erianthum*	1997
	Rytidosperma laeve	1997
	Rytidosperma linkii var. *fulvum*	1997
	Rytidosperma pallidum	1997
	Rytidosperma penicillatum	2002
V	*Rytidosperma pilosum*	1997
	Rytidosperma racemosum	1997
E	*Rytidosperma semiannularis*	1997
	Rytidosperma setaceum	1997
	Rytidosperma tenuius	1997
C	***Senecio bathurstianus***	1997

Risk	Indigenous Species	Year
	Senecio glomeratus	1997
	Senecio hispidulus	2003
E	*Senecio prenanthoides*	1997
	Senecio quadridentatus	2003
E	*Spyridium parvifolium*	1997
C	*Stellaria pungens*	1997
E	*Stylidium armeria/graminifolium*	1997
	Tetrarrhena juncea	1997
E	*Tetratheca ciliata*	1997
V	*Thelymitra ?peniculata*	1997
	Themeda triandra	2003
E	*Thysanotus tuberosus*	1997
E	*Viola hederacea*	1997
E	*Wahlenbergia gracilis*	1997
E	*Wahlenbergia stricta*	1997
V	*Xanthorrhoea minor*	1997
E	*Xanthosia dissecta*	1985

Introduced Species

Acacia decurrens	*Cyperus eragrostis*	*Paraserianthes lophantha*
Acacia longifolia subsp. *longifolia*	*Cytisus scoparius*	*Paspalum dilatatum*
Acer pseudoplatanus	*Dactylis glomerata*	*Passiflora tarminiana*
Agapanthus praecox	*Delairea odorata*	*Pennisetum clandestinum*
Agrostis capillaris	*Dipogon lignosus*	*Phalaris aquatica*
Allium triquetrum	*Ehrharta erecta*	*Pinus radiata*
Anthoxanthum odoratum	*Ehrharta longiflora*	*Pittosporum undulatum*
Arctotheca calendula	*Erica lusitanica*	*Plantago lanceolata*
Arrhenatherum elatius	*Fraxinus angustifolia*	*Polygala myrtifolia*
Avena barbata	*Freesia alba × leichtlinii*	*Prunus cerasifera*
Bellis perennis	*Galium aparine*	*Ranunculus repens*
Briza maxima	*Genista linifolia*	*Romulea rosea*
Bromus catharticus	*Genista monspessulana*	*Rubus anglocandicans*
Buddleja davidii	*Hakea salicifolia*	*Salix* sp.
Chamaecytisus palmensis	*Hedera helix*	*Solanum nigrum*
Chrysanthemoides monilifera monilifera	*Holcus lanatus*	*Sonchus oleraceus*
Cirsium vulgare	*Hypericum tetrapterum*	*Taraxacum officinale* spp. agg.
Conyza ?sumatrensis	*Hypochoeris radicata*	*Tradescantia fluminensis*
Coprosma robusta	*Ilex aquifolium*	*Ulex europaeus*
Cortaderia selloana	*Jasminum* sp.	*Verbena bonariensis* s.l.
Cotoneaster glaucophyllus	*Juncus articulatus*	*Vicia disperma*
Cotoneaster pannosus	*Lilium formosanum*	*Vicia ?hirsuta*
Cotoneaster simonsii	*Linum trigynum*	*Vicia sativa*
Crataegus monogyna	*Lolium perenne*	*Vinca major*
Crepis capillaris	*Lonicera japonica*	*Vulpia bromoides*
Crocosmia × crocosmiiflora	*Oxalis incarnata*	*Watsonia borbonica*
Cynodon dactylon	*Oxalis purpurea*	*Watsonia meriana bulbillifera*

Notes concerning some of the locally threatened plant species

Acacia leprosa (Cinnamon Wattle), Dandenong Range variant. Present in moderate numbers (probably a few dozen) near the boundary with the Dandenong Ranges National Park.

Acacia mucronata (Narrow-leaf Wattle). A copse grows beside Arbor Av, Ferntree Gully, next to the national park.

Agrostis aemula (Purplish Blown Grass). Found sporadically, likely to appear in various locations from time to time.

Arthropodium milleflorum (Pale Vanilla-lily). Very small numbers found near Government Rd in The Basin and near Walbundry Av and Barclay Av in Ferntree Gully.

Asperula conferta (Common Woodruff). Found beside Bayview Cr, The Basin, at its eastern end. Numbers not recorded.

Bedfordia arborescens (Blanket-leaf). Only found near the national park boundary below Government Rd in The Basin, in small numbers.

Blechnum cartilagineum (Gristle Fern). Found on the east-facing slope near Government Rd, The Basin.

Bulbine bulbosa (Yellow Bulbine-lily). Several plants were found beside Walbundry Av in Ferntree Gully.

Cheilanthes austrotenuifolia (Green Rock Fern). One patch was found beside Hansen Rd in Boronia.

Chiloglottis valida (Common Bird-orchid). Found beside Inverness Av, The Basin. Numbers not recorded.

Correa reflexa (Common Correa). Found beside View Rd, The Basin. Numbers not recorded.

Cynoglossum suaveolens (Sweet Hound's-tongue). Found beside Barclay Av, Upper Ferntree Gully. Numbers not recorded.

Daviesia leptophylla (Narrow-leaf Bitter-pea). Small numbers were found on Chandlers Hill and the west face of the Dandenong Ranges.

Desmodium gunnii (Southern Tick-trefoil). Found beside Bayview Cr, The Basin, at its eastern end. Numbers not recorded.

Hakea ulicina (Furze Hakea). Found beside Inverness Av, The Basin. Numbers not recorded.

Juncus vaginatus (Clustered Rush). One plant found beside Government Rd, The Basin and another at the intersection of Heath Av and Arbor Av in Ferntree Gully (the latter at risk from road grading).

Linum marginale (Native Flax). Small populations found beside Mountain Hwy and Mercia Av in The Basin and beside Burwood Hwy in Upper Ferntree Gully.

Olearia argophylla (Musk Daisy-bush). Very small numbers found beside Toorak Av and Claremont Av in The Basin.

Pimelea axiflora (Bootlace Bush). Found in small numbers on the east-facing slope near Government Rd, The Basin, and near Arbor Av in Ferntree Gully.

Pimelea curviflora (Curved Rice-flower). Found in small numbers beside Hansen Rd, Boronia and beside Birdwood Av and Walbundry Av in Ferntree Gully.

Poa ?*sieberiana* (Grey Tussock-grass). Found beside Birdwood Av, Ferntree Gully (numbers of plants not recorded), but they could be just aberrant specimens of *Poa morrisii*.

Polystichum proliferum (Mother Shield-fern). Found beside Arbor Av, Ferntree Gully. Numbers of plants were not recorded, but were very small and possibly just one.

Pterostylis longifolia (=*P. melagramma*) (Tall Greenhood). Recorded by Mr Andrew Paget on the north side of Lucas Ct, Boronia in 1985. Probably more widespread but overlooked due to its cryptic nature.

Pultenaea scabra (Rough Bush-pea). Scattered on the northeastern slopes of Chandlers Hill in The Basin.

Rytidosperma erianthum (Hill Wallaby-grass). A small but probably viable population was found on the northern nature strip of Olivebank Rd, Ferntree Gully.

Senecio hispidulus var. *dissectus* (Rough Fireweed). One plant found beside Mercia Av, The Basin, and another found nearby, beside Old Forest Rd.

Spyridium parvifolium (Australian Dusty Miller). Scattered in small numbers around The Basin.

Stellaria pungens (Prickly Starwort). One plant was found beside Arbor Av, Ferntree Gully.

Tetratheca ciliata (Pink-bells). Found beside Arbor Av, Ferntree Gully. Numbers of plants were not recorded, but were very small and possibly just one.

Thysanotus tuberosus (Common Fringe-lily). Found beside Hansen Rd, Boronia. Numbers not recorded.

Wahlenbergia stricta (Tall Bluebell). Scattered on the west face of the Dandenong Ranges close to the national park.

Fauna of special significance

The following list is probably very incomplete because various significant species would be expected near the Dandenong Ranges National Park but no serious investigation has been done.

Vulnerable in Victoria and listed under the *Flora and Fauna Guarantee Act*

Powerful Owl. Commonly observed in the site.

Uncommon in the Melbourne region

Australian King-Parrot. Abundant around The Basin.

Uncommon in Knox

Koala. Occasionally seen in Upper Ferntree Gully and likely to move through properties near the national park.

Fauna habitat features

- The tree canopy, fragmented though it is, supports good native birdlife including uncommon species such as abundant Australian King-Parrots;
- Many trees have hollows suitable for habitation by native birds, bats or insects;
- Residential gardens often support large populations of Common Ringtail Possums, which represent prey for Powerful Owls;
- Areas with dense shrubs (particularly prickly, indigenous species) provide protection and nest sites for small native birds such as wrens.

Significance ratings

The following is an assessment of the site's significance against the Department of Sustainability & Environment's standard criteria (Amos 2004).

Ecological Integrity and Viability

The role that this site plays in linking other sites of greater biological importance fits the description of an ecological linkage that is 'Important at Local Scale - Link between individual remnant habitat blocks', which criterion 1.2.6 of Amos (2004) recognises to be of **Local** conservation significance.

Regionally Threatened Ecological Vegetation Class

The EVCs represented within the site are predominantly regionally threatened, but no examples were found that would qualify as 'remnant patches' in the sense intended by criterion 3.2.3 of Amos (2004). As a result, no significance can be formally assigned to recognise the threatened EVCs. Any areas which may be discovered in the future to qualify as remnant patches would be of Regional or State significance and should be placed under ESO2 rather than ESO3.

Rare or Threatened Flora

The Dandenong Range variant of *Acacia leprosa* is listed as 'rare' in Victoria. The population in this site is so small and fragmented that it does not make a significant contribution to the total population of the taxon, and its viability relies on proximity to other sites (particularly the Dandenong Ranges National Park). It follows that the site is of **Local** significance under criterion 3.1.2 of Amos (2004).

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

Rare or Threatened Fauna

The abundance of Australian King-Parrots is of **Local** significance under criterion 3.1.5, on the same basis as just discussed for flora.

The Powerful Owl is a vulnerable species in Victoria and individuals of the species periodically move through the site and probably prey on possums there. However, the site does not seem to represent habitat for the species in the sense intended in criterion 3.1.2, so no formal significance rating is given here.

Threats

- Prevention of establishment of young indigenous shrubs and trees due to suburban gardening and mowing;
- Loss or decline of plant species whose populations are so small that they are vulnerable to inbreeding, poor reproductive success or elimination by misadventure;
- Invasion by environmental weeds;
- Killing of mature remnant trees by root severance or soil compaction in residential gardens and on road verges;
- Eucalypt dieback disease in some areas.

Management issues

- Landowners and occupiers can help maintain the site's important ecological function by protecting trees (particularly indigenous ones) from root damage or soil compaction, and allowing some young trees to establish and ultimately replace the current generation;
- People who are prepared to improve the site's ecological function should consider planting some prickly indigenous shrubs, such as Manuka (*Leptospermum scoparium*), Prickly Moses (*Acacia verticillata*) or Sweet Bursaria (*Bursaria spinosa*) to encourage small insect-eating birds, which will in turn help to control insect pests;
- Sweet Pittosporum (*Pittosporum undulatum*) is probably the most serious weed in the site, and is widely tolerated or encouraged in residential gardens. Females should be removed whenever possible, and males should preferably be removed if they are beneath eucalypts, which they debilitate. Females can be recognised by the presence of fruit between about November and April.

Administration matters

- This site is suited to an Environmental Significance Overlay for the reasons discussed under the heading, 'Significance ratings', and because of land development potential in some areas. The boundary around the Boronia activity centre takes into account Council's 'Boronia Structure Plan' and its implementation through planning scheme amendment C062, which was with a review panel at the time of writing;
- The whole site is presently covered by Schedules 1 or 3 of the Vegetation Protection Overlay (VPO1) in the Knox Planning Scheme. Some of the area covered by these schedules is not regarded here as being in need of such protection, and some of it (Site 104, west of the railway line) is recommended to be covered by a revised VPO schedule;
- The more elevated parts of the site are covered by Significant Landscape Overlay Schedule 2 under the Knox Planning Scheme.

Information sources used in this assessment

- Ecological surveys by Dr Lorimer during 1997-2003 in various areas scattered across the site. These were prepared partly for this study (using the standard survey procedures discussed in Section 2.4 of Volume 1) and partly for the report, *'A Survey and Management Plan for Significant Vegetation of Roadsides in Knox'* by G.S. Lorimer for Knox City Council (May 1998, 137 pp.). The sites surveyed were Chandler Park, Batterham Park, the railway corridor through Upper Ferntree Gully and numerous roadsides and front yards. The data gathered included:

  - Compilation of lists of indigenous and introduced plants for each of fifty-nine parts of the site;
  - Mapping of vegetation communities, ecological condition and uncommon plant species;
  - Descriptions of the vegetation's structural and floristic composition;
  - Incidental observations of fauna; and
  - Checks for fauna habitat, ecological threats and management issues.
- Equivalent surveys of the Upwey Ck corridor, Talaskia Reserve and Boronia Rd road verge by Mr Rik Brown as part of the present study;
- Twelve quadrat records from what are now properties on the north side of Lucas Close, Boronia prior to the site's development, all recorded by Andrew Paget in his 1985 unpublished RMIT thesis for B.App.Sci.;
- General visual inspection of the area's vegetation by the author over many hours while inspecting sites from this report that are embedded within the present one, as well as while driving around the area for the specific purpose of inspecting vegetation, detecting sites and determining site boundaries;
- A 'windscreen survey' and aerial photography analysis by Dr Lorimer in May 2010 to adjust the boundary around the Boronia activity centre in response to recent land development and planning scheme amendment C062, which implements the Boronia Structure Plan;
- Aerial photography from February 2001, April 2003, February 2007 and December 2009;
- Satellite imagery of the district;
- The Department of Sustainability & Environment's BioMaps of the area;
- Maps of geology and topography produced by agencies of the Victorian government.