

7. Section-by-Section Descriptions of Waterway Reserves

The creek corridors have been subdivided into forty sections to facilitate discussions of localised issues and features of importance. Each one is labelled with a prefix to indicate which waterway, and a number to indicate how far downstream it is. For example, the most upstream section on Ferny Creek is labelled F1. The sections are indicated on Figure 1, p.iv.

The rest of this chapter contains descriptions and specific recommendations for each section. The text should generally be read in conjunction with the colour maps at the back of the report. The number of the relevant map is given immediately after the heading for each section.

7.1 Ferny Creek

F1. Gilmour Park and Ferny Ck Retarding Basin, Upper Ferntree Gully Map sheet 1; Melway Ref. 74 F8

Description: Mown sports field as well as a retarding basin with wetland vegetation, fringing remnant and planted trees and shrubs.

Habitat types present	Condition	Dominant & character species
1: Perennial wetland	B, C, D	Cumbungi (<i>Typha domingensis</i> and <i>T. orientalis</i>), Tall Spike-rush (<i>Eleocharis sphacelata</i>), rushes (<i>Juncus</i>)
6: Riparian forest	C, D	Manna Gum (<i>Eucalyptus viminalis</i>), Blackwood (<i>Acacia melanoxylon</i>)

Significant Species

Plants

Amyema quandang (Grey Mistletoe)
Alternanthera denticulata (Lesser Joyweed)
Eleocharis sphacelata (Tall Spike-rush)
Typha domingensis (Cumbungi)

Animals

Platypus
 Chestnut Teal
 Australian Pelican
 Clamorous Reed Warbler
 Water Rat (report by passer-by)

Significant Fauna Habitat

Permanent wetland: Approximately one hectare of open water with clumps of Cumbungi and Tall Spike-rush provides food and cover for various water birds, and perhaps Platypus.

Dominant or Most Potentially Damaging Weeds

Acacia decurrens (Early Black Wattle)
Cortaderia selloana (Pampas Grass)
Delairea odorata (Cape Ivy)
Genista monspessulana (Montpellier Broom)
Hedera helix (Ivy)
Paspalum distichum (Water Couch) in wetland areas

Pittosporum undulatum (Sweet Pittosporum)
Ranunculus repens (Creeping Buttercup) in wetland areas
 Various exotic grasses

Rehabilitation Opportunities

- Consider allowing and encouraging rushes and Cumbungi to occupy a greater part of the wetland.
- Control of middle and ground stratum weeds on banks below Ferndale Rd.

Other Management Issues

It is recommended that a management plan be prepared for the indigenous flora and fauna of Gilmour Park.

Opportunities for Community Education, Interpretation and Participation

- Promotion of wetland habitat and bird species among users
- Promotion of appropriate garden waste disposal to neighbouring residents (e.g. Ferndale Rd)

F2. Ferny Creek: Downstream of Gilmour Park (Melway Ref. 74 F8) to Waters Av (74 D7-8), Upper Ferntree Gully Map sheet 1; Melway Ref. 74 F8 to 74 D7

Description: Mostly open, meandering creek with patchy remnant vegetation including fine specimens of Manna Gum (*Eucalyptus viminalis*).

Habitat types present	Condition	Dominant & character species
1: Perennial stream	D	Nil
6: Riparian forest	C, D	Manna Gum (<i>Eucalyptus viminalis</i>), Blackwood (<i>Acacia melanoxylon</i>)

Significant Trees

All but the downstream 200 metres or so of this section has patches of remnant vegetation, including many very large and old Manna Gums.

Significant Species

Plants

Gynatrix pulchella (Hemp Bush)
Pomaderris aspera (Hazel Pomaderris)
Potamogeton crispus (Curly Pondweed)
Prostanthera lasianthos (Victorian Christmas Bush)

Animals

Australian Goshawk
 Water Rat (report by passer-by)

Fauna Habitat

There is sufficient indigenous vegetation to be effective as part of a habitat corridor. The Manna Gums have hollows for potential nesting or roosting.

Dominant or Most Potentially Damaging Weeds

<i>Crataegus monogyna</i> (Hawthorn)	<i>Rubus discolor</i> (Blackberry)
<i>Hedera helix</i> (Ivy)	<i>Salix</i> spp. (willows)
<i>Pittosporum undulatum</i> (Sweet Pittosporum)	<i>Tradescantia albiflora</i> (Wandering Jew)
<i>Prunus cerasifera</i> (Cherry-plum)	exotic grasses

Revegetation/Rehabilitation Opportunities

- Replacement of willows and other woody weeds with indigenous trees and shrubs.
- Planting of indigenous species in the last 200 metres or so of this section.

Other Management Issues

- Weeds coming from gardens along north side of creek.
- Erosion caused by cattle entering the creek from the southern side in several places.
- One private property has terraced garden beds extending to the edge of the creek.

Opportunities for Community Education, Interpretation and Participation

- 'Creek Watch' or 'Creek Care' program involving adjacent residents.
- Highlight by signs (or other) the habitat value of Manna Gums with hollows in the stretch of waterway west of Gilmour Park because of relatively high number of park users.

**F3. Ferny Creek: Waters Av to the north-west corner of Kings Park (74 D5/6),
Upper Ferntree Gully
Map sheet 1; Melway Ref. 74 D7-8**

Description: This section of the waterway is entirely underground with mown grass on top and mostly non-indigenous native plantings along the margins.

Habitat type present	Condition	Dominant & character species
8: Wattle scrub	D	Blackwood (<i>Acacia melanoxylon</i>); Two remnant Manna Gums (<i>Eucalyptus viminalis</i>) suggest that the vegetation type was formerly Manna Gum riparian forest.

Dominant or Most Potentially Damaging Weeds

Hakea salicifolia (Willow-leaf Hakea) - planted
Acacia baileyana (Cootamundra Wattle) - planted

Revegetation Opportunities

Remove non-indigenous plantings (especially the two invasive species above) and replace with indigenous species of riparian forests. *Low priority.*

Opportunities for Community Education, Interpretation and Participation

If the suggestion above for revegetation is to be implemented, community education will be necessary so people understand why plantings are being cut down.

F4 Kings Park, Upper Ferntree Gully

Map sheet 1; Melway Ref. 74 D6

Description: Mown grass and playing fields with exotic and non-indigenous native plantings around boundaries, buildings and internal roads. No remnant native vegetation.

Fauna Habitat

White-faced Herons and Galahs feed on playing fields.

Revegetation Opportunities

- Replacement of current plantings with indigenous riparian forest species is possible but probably not a high priority and may be inconsistent with current uses, management and user perceptions.
- Patchy screening of fences and houses along southern boundary has been achieved by existing plantings. This could be thickened with block plantings of indigenous shrubs and tussocky species. However, denser planting along back fences may not be appreciated by local residents.

F5. Ferny Creek: North-west corner of Kings Park, Upper Ferntree Gully to Lysterfield Rd, Ferntree Gully

Map sheet 2; Melway Ref. 74 D5 to 74 C5

Description: This section of the waterway is entirely underground with mown grass on top and sparse plantings of mostly non-indigenous natives on the margins.

Habitat types present	Condition	Dominant & character species
6: Riparian forest (very vestigial)	D	Manna Gum (<i>Eucalyptus viminalis</i>), Blackwood (<i>Acacia melanoxylon</i>)

Dominant or Most Potentially Damaging Weeds

The dominant weeds in this section occur amongst plantings in unmown areas (see below) and include Blackberry (*Rubus discolor*), Paspalum (*Paspalum dilatatum*), Creeping Buttercup (*Ranunculus repens*) and Toowoomba Canary Grass (*Phalaris aquatica*). Willow-leaf Hakea (*Hakea salicifolia*), Cherry-plum (*Prunus cerasifera*) and Cotoneasters (*Cotoneaster* spp.) occur as planted specimens.

Revegetation/Rehabilitation Opportunities

- Expanses of mown grass could be planted with suitable flood plain species, but the drainage function would have to be considered.
- Five sleeper-lined beds planted north of the Eastern Energy Depot are being decimated by weeds. They need weeding and preferably replanting with indigenous species. One of the beds already has a few indigenous plants including Silver Banksia (*Banksia marginata*) and Tree Everlasting (*Ozothamnus ferrugineus*).

- Plantings along factory walls are very sparse and severely weed invaded. They require weeding and preferably replanting with indigenous species.

Opportunities for Community Education, Interpretation and Participation

None at this stage.

F6. Ferny Creek: Lysterfield Rd to Glenfern Rd, Ferntree Gully Map sheet 2; Melway Ref. 74 C5 to 74 A5

Description: This section is dominated by exotic trees, shrubs and other weeds, particularly willows (*Salix* spp.). Very patchy remnant vegetation occurs in and along the creek, never exceeding D condition. The most outstanding features are tall (20-25 m) Manna Gum (*Eucalyptus viminalis*) and Yellow Box (*E. melliodora*) trees with hollows.

Habitat types present	Condition	Dominant & character species
1: Perennial stream	D	Nil
6: Riparian forest	D	Manna Gum (<i>Eucalyptus viminalis</i>), Yellow Box (<i>Eucalyptus melliodora</i>)
13: Yellow Box & Bundy forest	D	Yellow Box (<i>Eucalyptus melliodora</i>)

Significant Trees

This section contains some tall specimens of Manna Gum and Yellow Box.

Significant Plant Species

Gynatrix pulchella (Hemp Bush)

Rapanea howittiana (Muttonwood) - Three larger plants and a few suckers.

Olearia argophylla (Musk Daisy-bush) - Not seen during this survey but reported for this section by Mr Darren Wallace.

Dominant or Most Potentially Damaging Weeds

There is serious weed invasion in all strata, including willows (*Salix* spp.), Ivy (*Hedera helix*), Desert Ash (*Fraxinus angustifolia*), Cherry-plum (*Prunus cerasifera*), Hawthorn (*Crataegus monogyna*), Firethorn (*Pyracantha* sp.), Wandering Jew (*Tradescantia albiflora*), Blackberry (*Rubus discolor*) and exotic grasses.

Significant Fauna Habitat

- Tall eucalypts with hollows undoubtedly provide nesting sites and shelter for fauna including parrots, cockatoos and possums.
- Sulphur-crested Cockatoos and Galahs feed on adjacent oval and other mown areas.

Revegetation/Rehabilitation Opportunities

- Indigenous trees are being smothered by Ivy, and should be rescued. *High priority.*

- The abundant willows will require considerable effort to remove and replace with indigenous vegetation. *Moderate priority.*
- Eucalypts are not reproducing themselves, and planting is required. *Moderate priority.*

Opportunities for Community Education, Interpretation and Participation

This section of waterway is traversed by a walking track on the south side until a little west of the library. Some of the impressive Manna Gums and Yellow Boxes could be signposted. Their value to fauna, especially uses of hollows, could be highlighted.

F7. Ferny Creek: Glenfern Rd to 100 metres downstream of Hancock Dr, Ferntree Gully Map sheets 2 & 3; Melway Ref. 74 A5 to 73 G6

Description: This section of creek is entirely underground with D condition Wattle scrub surrounded by mainly mown grass between Faith St and Hancock Dr, and mainly non-indigenous natives with mown grass east of Faith St. Nine remnant eucalypts occur west of the bowling club.

Habitat types present	Condition	Dominant & character species
5: Swamp scrub	D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	D	Blackwood (<i>Acacia melanoxylon</i>)
6: Riparian forest	D	Manna Gum (<i>Eucalyptus viminalis</i>) - scarce

Significant Trees

There is a Manna Gum approximately 20 m tall with a trunk diameter of 1.4 m behind 10 Taldra Dr. Some species of fauna are likely to be attracted to its hollows for nesting or roosting. Other fauna are likely to be drawn to the tree's size, and this may explain our observation of two Australian Hobbies (uncommon birds of prey throughout Australia) perched in it for at least 15 minutes.

Another tree with potential nesting hollows is a large Swamp Gum (*Eucalyptus ovata*) within the wattle scrub approximately 100 m upstream from Hancock Dr. It is approximately 18 m tall with a trunk diameter of 1.2 m.

Dominant or Most Potentially Damaging Weeds

Willows (*Salix* spp.) and Willow-leaved Hakea (*Hakea salicifolia*) have been planted and represent a moderate weed threat.

Elsewhere in the unmown areas, the dominant weeds are Blackberry (*Rubus discolor*), Toowoomba Canary Grass (*Phalaris aquatica*) and Wandering Jew (*Tradescantia albiflora*), growing among a few regenerating indigenous species.

Revegetation/Rehabilitation Opportunities

Most of the vegetation in this section comprises non-indigenous native trees and shrubs, especially eucalypts, wattles and paperbarks. Some possibly indigenous species have been used in small plantings near the netball courts.

Overall, this section has little understorey and poor continuity. This is reflected in the absence of small native birds. This situation could be improved by extensive planting of indigenous understorey species, in accordance with the guidelines of Section 6.3 on p.33.

The group of nine remnant eucalypts west of Ferntree Gully Bowling Club could be fenced off from mowing to allow them to reproduce and spread.

Other Management Issues

- The eleven remnant eucalypts in this section (nine near the bowling club, two from Faith St to Hancock Dr) should be given concerted protection and a chance to reproduce where possible.
- Tree hollows are very sparse in this section.

Opportunities for Community Education, Interpretation and Participation

If the nine eucalypts near the bowling club are fenced off to allow regeneration, this should be explained by signs.

F8 Ferny Creek: From 100 m downstream of Hancock Dr to accessway from Bryden Dr, Ferntree Gully Map sheet 4; Melway Ref. 73 G 6-7

Description: This section extends south almost to the banks of Monbulk Ck. The creek has been straightened and is fringed by a narrow, mostly continuous corridor of Blackwoods (*Acacia melanoxylon*) and willows (*Salix* spp.). There are a few small seasonal wetlands, patches of Common Reed (*Phragmites australis*), and two relatively large areas of remnant trees and shrubs. These are surrounded by weedy paddocks with blackberry patches.

Habitat types present	Condition	Dominant & character species
1: Perennial stream	D	Nil
3: Seasonal wetland	B,C,D	Rushes (<i>Juncus</i> spp.), Common Reed (<i>Phragmites australis</i>), Cumbungi (<i>Typha</i> spp.), Common Spike-rush (<i>Eleocharis acuta</i>), Hairy Willow-herb (<i>Epilobium hirtigerum</i>), Slender Knotweed (<i>Persicaria decipiens</i>)
4: Phragmites wet grassland	C,D	Common Reed (<i>Phragmites australis</i>)
5: Swamp scrub	C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	C,D	Blackwood (<i>Acacia melanoxylon</i>)
7: Swamp Gum forest	C,D	Swamp Gum (<i>Eucalyptus ovata</i>), Blackwood (<i>Acacia melanoxylon</i>)

Significant Sites

Despite its degraded and extremely weedy nature, this whole section is significant in providing a suite of flora and fauna values and regeneration opportunities. The small seasonal wetlands include some significant plant species and provide high priority regeneration (and possibly revegetation) opportunities. The whole section provides a suite of interacting habitat values for fauna which are discussed below.

Significant Species

Plants

Alternanthera denticulata (Lesser Joyweed)
Carex fascicularis (Tassel Sedge)
Eleocharis acuta (Common Spike-rush)
Gahnia sieberiana (Red-fruit Saw-sedge)
Gynatrix pulchella (Hemp Bush)
Pomaderris aspera (Hazel Pomaderris)
Typha domingensis (Cumbungi)

Animals

Brown Goshawk
 Golden-headed Cisticola

Significant Fauna Habitat

- This section appears to be a local stronghold for Brown Goshawks, which utilise the combination of continuous cover along the creek for nesting and shelter and the unslashed grasses and blackberry thickets for hunting. The reed beds, rank grasses and blackberries harbour many prey items which are probably mainly introduced mammals (rabbits, mice) and birds (starlings, turtle-doves etc.).
- Unslashed grasses and rushes provide habitat for the Golden-headed Cisticola, which is locally common in this general area but is otherwise decreasing due to urban development.
- Blackberry thickets provide habitat for small birds such as Silvereyes and Superb Fairy Wrens.
- Silvereyes move up and down the creek corridor because of its fairly continuous cover.
- Some hollows in the larger Swamp Gums provide potential nesting and roosting sites.

Dominant or Most Potentially Damaging Weeds

- blackberry (*Rubus discolor*) - abundant throughout, especially in the eastern third;
- introduced grasses;
- Patterson's Curse (*Echium plantagineum*) - in horse paddocks, where it often appears, having arrived in 'meadow hay' of mediocre quality. Patterson's Curse appears in prohibited plant legislation in all Australian states and territories and is an excellent example of how problem plant species are spread through the transporting and distribution of stock feed;
- willows (*Salix* spp.) - along the creek;
- Wandering Jew (*Tradescantia albiflora*).

Rehabilitation Opportunities

Allow on-site regeneration to occur in Seasonal Wetlands and patches of Wattle scrub and Swamp Gum forest through targeted weed control by trained operators. There is already strong seed regeneration of Swamp Gums and Blackwoods occurring in the patch of Swamp Gum forest immediately east of Ferny Creek.

Other Management Issues

This whole section provides many opportunities for habitat protection and improvement. However, this is complicated by the fact that part of it (along with adjoining sections F9 and M2-4) is under consideration for development of a golf course, playing fields and other facilities. The possibilities for meshing conservation objectives with such developments is discussed on p.38.

Opportunities for Community Education, Interpretation and Participation

- Involvement of local residents in 'Wetland Watch' or 'Creek Watch' projects;
- promotion to raise the profile within the local and broader Knox community of the habitat values of areas that are probably widely perceived as weedy wastelands.

F9. Ferny Creek: Entrance to horse agistment paddocks from Bryden Dr, Ferntree Gully to Henderson Rd, Knoxfield Map sheets 4 & 5; Melway Ref. 73 G 6-7

Description: This section extends south to the banks of Monbulk Ck. The creek has been straightened and is fringed by a narrow, discontinuous corridor of Blackwoods (*Acacia melanoxylon*) and willows (*Salix* species). There are a few seasonal wetlands and one relatively large area of Wattle scrub. These are surrounded by weedy paddocks with patches of blackberry and patches of Common Reed. The eastern one-third (approximately) is currently grazed by horses (fairly lightly).

Habitat types present	Condition	Dominant & character species
1: Perennial stream	D	Blunt Pondweed (<i>Potamogeton ochreatus</i>)
3: Seasonal wetland	D	Rushes (<i>Juncus</i> spp.)
4: Phragmites wet grassland	C,D	Common Reed (<i>Phragmites australis</i>)
5: Swamp scrub	D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	C,D	Blackwood (<i>Acacia melanoxylon</i>)
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>), Swamp Paperbark

Significant Species

Plants

Gynatrix pulchella (Hemp Bush)
Persicaria subsessilis (Hairy Knotweed)
Pomaderris aspera (Hazel Pomaderris)

Animals

Brown Goshawk
 Golden-headed Cisticola

Significant Fauna Habitat

The abundance of unslashed Common Reed, rushes, exotic grasses and blackberry thickets provide good habitat for native birds (especially birds of prey and small species such as the

Golden-headed Cisticola and Superb Fairy Wren). The potential to improve these habitat values makes this section significant.

Grey Mistletoe (*Amyema quandang*) is common in Blackwoods in this section and provides food for the nomadic Mistletoe Bird.

Dominant or Most Potentially Damaging Weeds

Blackberry (*Rubus discolor*)

Introduced grasses, especially Toowoomba Canary-grass (*Phalaris aquatica*)

Aster-weed (*Aster subulatus*)

Willows (*Salix* spp.) - along the creek

Desert Ash (*Fraxinus angustifolius*) - along the creek

Wandering Jew (*Tradescantia albiflora*) - along the creek

Revegetation/Rehabilitation Opportunities

- Allow swamp scrub and Phragmites grassland vegetation to spread by relieving slashing.
- Create wetlands in the flood plain.
- Remove willows and Desert Ash trees from the creek and replace with indigenous trees and shrubs, either by allowing existing Blackwoods to spread or by replanting.

Other Management Issues

- Along with adjoining sections F8 and M4, this section provides many opportunities for habitat protection and improvement. However, this is complicated by the fact that part of it is under consideration for development of a golf course, playing fields and other facilities. The possibilities for meshing conservation objectives with such developments is discussed on p.38.
- Pollution of the creek: During the survey work a black, non-oily contaminant was noticed in Ferny Creek just upstream of its confluence with Monbulk Creek.

Opportunities for Community Education, Interpretation and Participation

- Involvement of local residents in 'Wetland Watch' or 'Creek Watch' projects.
- promotion to raise the profile within the local and broader Knox community of the habitat values of areas that are probably widely perceived as weedy wastelands.

7.2 Monbulk Creek

M1. Monbulk Creek: Lysterfield Rd, Lysterfield to the fence line 550 metres west of Blackwood Park Rd, Ferntree Gully Map sheet 7; Melway Ref. 74 C9 to 73 H8

Description: narrow, very fragmented and weedy riparian strip.

Habitat types present	Condition	Dominant & character species
1: Perennial stream	C,D	Common Duckweed (<i>Lemna disperma</i>)
3: Seasonal wetland	C,D	Rushes (<i>Juncus</i> spp.)
5: Swamp scrub	C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	C,D	Blackwood (<i>Acacia melanoxylon</i>)
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>)

Significant Sites

Difficult to assign significance on the basis of vegetation, except for the sparse presence of three or four significant species. The whole section of Monbulk Creek in the study area is a site of zoological Significance due to the presence of Platypus.

Although very degraded, the meandering course of the creek in the stretch from Lysterfield Rd to almost as far as Napoleon Rd has a degree of naturalness that possibly carries some significance, at least for landscape and amenity values and possibly for future improvement of biological values.

Significant Species

Plants

Gynatrix pulchella (Hemp Bush) - one plant

Lemna disperma (Common Duckweed) - in creek between Lysterfield Rd and Napoleon Rd

Persicaria subsessilis (Hairy Knotweed) - scattered patches fairly well distributed

Animals

Platypus

Significant Fauna Habitat

Platypus are present (Serena and Pettigrove, 1996). In places, blackberry thickets are all that is left to satisfy the preference of Platypus for sites with overhanging vegetation to protect burrows.

Likewise, small birds such as Superb Blue Wrens and Silvereyes now rely on blackberry thickets for protection and food.

The narrow corridor is sufficiently continuous to allow flocks of Silvereyes to move up and down the waterway, presumably following the fruiting of Blackberry and perhaps Hawthorn during the survey period.

Dominant or Most Potentially Damaging Weeds

- Blackberry (*Rubus discolor*) - present along virtually all of this section but in the stretches west of Lysterfield Rd and west of Blackwood Park Rd it is generally less prolific and not forming the dense, often impenetrable thickets that it does along other parts of Monbulk Creek.
- Willows (*Salix* spp.) are abundant in this section, especially between Lysterfield Rd and Napoleon Rd, and west of Blackwood Park Rd.
- Hawthorn (*Crataegus monogyna*)

Rehabilitation Opportunities

- Visual evidence suggests that Blackwoods and Swamp Paperbarks are regenerating strongly in this section, and would do so increasingly if willows were removed. *Low priority*.
- Blackberry control programs need to be balanced with revegetation to replace the wildlife habitat that blackberries provide.

Other Management Issues

On the north side of the creek in the 550 metre stretch west of Blackwood Park Rd, stock access to the creek has caused erosion, and related problems (see Section 6.8, p.39).

M2. Monbulk Creek: From the fence line 550 metres west of Blackwood Park Rd, Ferntree Gully to the north-east corner of the Knox Italian Community Centre property, Rowville

Map sheet 4; Melway Ref. 73 H8 to 73 D9

Description: This section includes the narrow, mostly continuous but weedy riparian strip and an expanse of flood plain to the south with weedy paddocks, reed beds, areas of slashed grass and virtually bare ground in parts.

Habitat types present	Condition	Dominant & character species
1: Perennial stream	D	Nil
3: Seasonal wetland	C	Rushes (<i>Juncus</i> spp.)
4: Phragmites wet grassland	C,D	Common Reed (<i>Phragmites australis</i>)
5: Swamp scrub	C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	C,D	Blackwood (<i>Acacia melanoxylon</i>)
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>)
10: Silver-leafed Stringybark & Swamp Gum forest	D	Silver-leafed Stringybark (<i>E. cephalocarpa</i>)

Significant Species

Plants

- Amyema quandang* (Grey Mistletoe) - many plants
- Calystegia marginata* (Forest Bindweed) - one plant
- Gynatrix pulchella* (Hemp Bush) - eight plants, widely separated
- Persicaria subsessilis* (Hairy Knotweed) - quite a few scattered patches
- Pomaderris aspera* (Hazel Pomaderris) - five plants, widely separated

Animals

- Golden-headed Cisticola
- Brown Goshawk
- Black-shouldered Kite
- Platypus

Fauna Habitat

- Blackberry thickets provide food and shelter for small indigenous birds and cover for mice and rabbits preyed upon by birds of prey.
- There is a fairly continuous wildlife corridor along creek.
- Paddocks with reed beds, long grass and rushes provide good habitat for the Golden-headed Cisticola.
- Some of the remnant eucalypts have hollows and are also used as perching sites for birds including three Black-shouldered Kites (at least two of which were juveniles, suggesting possible local breeding).
- Grey Mistletoe (*Amyema quandang*) is common along the creek, providing food for the Mistletoebird.

Dominant or Most Potentially Damaging Weeds

Blackberry (*Rubus discolor*) - thickets line the creek for most of its length
willows (*Salix* spp.)

Aster-weed (*Aster subulatus*)

Hawthorn (*Crataegus monogyna*)

Square-stem St. John's Wort (*Hypericum tetrapterum*)

various exotic grasses, including:

- Sweet Vernal Grass (*Anthoxanthum odoratum*)
- Toowoomba Canary Grass (*Phalaris aquatica*)
- Paspalum (*Paspalum dilatatum*)

Revegetation/Rehabilitation Opportunities

- A number of isolated remnant eucalypts (mainly Swamp Gums) occur towards the eastern end of this section. They will not be replaced as they die unless replanting occurs or fences are put around them (as described on p.34 in Section 6.3). *High priority.*
- Consider allowing the large reed bed north of Moama Place to spread by relieving slashing. *High priority.*
- This section of flood plain is extremely depleted and would benefit ecologically from the construction of seasonal wetlands. *Moderate priority.*

- Willow removal (if feasible) would allow Blackwoods and Swamp Paperbarks to spread. Refer to 'Willow Control Procedure' (Melbourne Water). *Low priority.*
- A barbed wire fence attached to a Swamp Gum should be removed. *Moderate priority.*
- Blackberry control needs to be balanced by revegetation to provide alternative wildlife habitat.

Other Management Issues

- Ringbarking of eucalypts by stock (probably horses).
- Step ladder constructed up large old Swamp Gum with hollows. Could this suggest egg collecting?
- Part of this section of waterway may be under consideration for development of a golf course, playing fields and other facilities. The possibilities for meshing conservation objectives with these developments is discussed on p.38.

Opportunities for Community Education, Interpretation and Participation

- Involvement of local residents in 'Creek Watch' or Bush Link' projects;
- Promotion to raise the profile of the habitat values of areas that are probably perceived as wastelands.

M3. Monbulk Creek: From the north-east corner of the Knox Italian Community Centre property to Henderson Rd, Knoxfield Map sheet 6; Melway Ref. 73 D9 to 73 B9

Description: This section contains only narrow, mostly continuous but weedy riparian vegetation. Large expanses of flood plain adjoin to the north (section F9) and south (section M4).

Habitat types present	Condition	Dominant & character species
1: Perennial stream	D	Nil
7: Swamp Gum forest (one tree)	D	Swamp Gum (<i>Eucalyptus ovata</i>)
8: Wattle scrub	C,D	Blackwood (<i>Acacia melanoxylon</i>), Black Wattle (<i>A. mearnsii</i>)

Significant Sites

This section is perhaps not particularly significant when considered on its own, but it lies in the middle of a large area of flood plain with strong existing values and it has considerable prospects for ecological improvement.

Significant Species

Persicaria subsessilis (Hairy Knotweed) - two small patches, probably more.
Platypus (Serena and Pettigrove, 1996)

Dominant or Most Potentially Damaging Weeds

Blackberry (*Rubus discolor*); Willows (*Salix* species); Desert Ash (*Fraxinus angustifolia*)

Rehabilitation Opportunities

Woody weeds and blackberries should be controlled in accordance with Section 6.1 on p.29.

Other Management Issues

This whole section provides many opportunities for habitat protection and improvement. However, this is complicated by the fact that part of it (along with adjoining sections F8, F9, M2 and M4) is under consideration for development of a golf course, playing fields and other facilities. The possibilities for meshing conservation objectives with such developments is discussed on p.38.

M4. Flood plain north of Kellets Rd, Rowville (Melway Ref. 73 C/D9 to 73 D11) Map sheet 6; Melway Ref. 73 D11 to 73 B9

Description: A large area of flood plain crossed by slow-flowing, non-perennial drains with a number of seasonal wetlands, weedy paddocks and very sparse remnant trees and shrubs.

Habitat types present	Condition	Dominant & character species
1: Perennial stream	D	Blunt Pondweed (<i>Potamogeton ochreateus</i>)
2: Perennial wetland	D	Cumbungi (<i>Typha ?orientalis</i>), Common Reed (<i>Phragmites australis</i>), Common Spike-rush (<i>Eleocharis acuta</i>), Water Plantain (<i>Alisma plantago-aquatica</i>), Slender Knotweed (<i>Persicaria decipiens</i>)
3: Seasonal wetland	B,C,D	Rushes (<i>Juncus</i> spp.), Fen Sedge (<i>Carex ?gaudichaudiana</i>), Common Spike-rush (<i>Eleocharis acuta</i>), Cumbungi (<i>Typha ?orientalis</i>), Water Plantain (<i>Alisma plantago-aquatica</i>), Slender Knotweed (<i>Persicaria decipiens</i>)
5: Swamp scrub	D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub (perhaps at least partly planted)	D	Blackwood (<i>Acacia melanoxylon</i>), Black Wattle (<i>A. mearnsii</i>)
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>)
10: Silver-leafed Stringybark & Swamp Gum forest	D	Silver-leafed Stringybark (<i>Eucalyptus cephalocarpa</i>)
9: Red Gum woodland	D	represented by 3 fairly small remnant trees of River Red Gum (<i>Eucalyptus camaldulensis</i>) and a few planted specimens, beside Karoo Rd

Significant Sites

The whole of this section, in combination with large areas of riparian vegetation and flood plain to the north and east along Monbulk and Ferny Creeks, could be regarded as a significant site with potential for conserving and improving habitat values through regeneration and revegetation. The existing seasonal wetlands are relatively extensive and include good numbers of some regionally significant plant species.

Significant Species

Plants

- Carex ?gaudichaudiana* (Fen Sedge) - identity unconfirmed
- Eucalyptus camaldulensis* (River Red Gum) - three small remnant trees
- Triglochin striatum* (Streaked Arrowgrass)
- Typha domingensis* (Cumbungi)

Animals

- White-necked Heron
- Nankeen Kestrel
- Golden-headed Cisticola

Significant Fauna Habitat

- Golden-headed Cisticolas are fairly abundant in the seasonal wetlands, rushes and unslashed weedy grasses.
- Herons and ducks were seen in the wetter seasonal wetlands, notably the large site near Kellets Rd.
- A Nankeen Kestrel was seen hunting over paddocks and perching in an extremely isolated group of Swamp Gums.
- The drains and seasonal and permanent wetlands would probably provide habitat for several frog species. During the very dry survey period only the Common Froglet (*Crinia signifera*) was heard.

Dominant or Most Potentially Damaging Weeds

- Water Couch (*Paspalum distichum*) - seasonal wetlands
- Paspalum (*P. dilatatum*) - seasonal wetlands
- Drain Flat-sedge (*Cyperus eragrostis*) - seasonal wetlands
- Aster-weed (*Aster subulatus*) - seasonal wetlands
- Creeping Buttercup (*Ranunculus repens*) - seasonal wetlands
- Blackberry (*Rubus discolor*)

Rehabilitation Opportunities

- Allow on-site regeneration to occur in seasonal wetlands by selectively controlling weeds and using simple fencing (eg. star pickets and one strand of wire) with signs to exclude slashing.
High priority.
- Exclude slashing from around remnant eucalypts and wattles to allow them to spread by seed.
High priority.

- There is a need for more trees because of the paucity of hollows and perching sites for birds of prey etc. *Moderate priority.*

Other Management Issues

- This whole section provides many opportunities for habitat protection and improvement. However, this is complicated by the fact that part of it (along with adjoining sections F8, F9, M2 and M3) is under consideration for development of a golf course, playing fields and other facilities. The possibilities for meshing conservation objectives with such developments is discussed on p.38.
- There is a need to define and maintain 'no-slash zones' for the reasons mentioned above and because slashing is facilitating the spread of weeds into wetlands.
- Drain construction, particularly in the southern wetlands, is changing the hydrology and ecology of this area, facilitating weed invasion and building up weedy and unsightly mounds of debris parallel to drains.

Opportunities for Community Education, Interpretation and Participation

- Involvement of local residents in 'Wetland Watch' projects. A few local children spoken to during the survey expressed interest in having this area returned to its pre-European condition (or similar).
- Promotion to raise the profile within the local and broader Knox community of the habitat values and wetlands of this area.

7.3 Ferntree Gully Creek

FTG1. Ferntree Gully Creek: Burwood Hwy to confluence with Ferny Creek, Upper Ferntree Gully

Map 1; Melway Ref. 74 G6 to 74 D5

Description: Highly degraded urban waterway. The creek has been replaced by a pipe, which is variously covered by houses, roads, mown grass, and a weedy channel with willows and a few Blackwoods.

Habitat types present	Condition	Dominant & character species
3: Seasonal wetland	D	Slender Knotweed (<i>Persicaria decipiens</i>)
6: Riparian forest	D	Manna Gum (<i>Eucalyptus viminalis</i>), Blackwood (<i>Acacia melanoxylon</i>)

Dominant or Most Potentially Damaging Weeds

- willows (*Salix* spp.)
- Blackberry (*Rubus discolor*)
- Cotoneasters (*Cotoneaster glaucophyllus* and *C. pannosus*)
- Hawthorn (*Crataegus monogyna*)
- Cherry-plum (*Prunus cerasifera*)
- Holly (*Ilex aquifolium*)
- Ivy (*Hedera helix*)
- Mirror Bush (*Coprosma repens*)
- Cape Ivy (*Delairea odorata*)
- Desert Ash (*Fraxinus angustifolia*)
- exotic grasses including;
 - Toowoomba Canary Grass (*Phalaris aquatica*)
 - Panic Veldt-grass (*Ehrharta erecta*)
 - Kikuyu (*Pennisetum clandestinum*)

Revegetation/Rehabilitation Opportunities

Some mown grassy verges could be planted with indigenous species taking into account the drainage functions of the area, possible unsettling effects on pedestrians and the fact that given the extreme unnaturalness of this section, indigenous plants may add further confusion to an already disparate landscape. *Low priority.*

There are some opportunities to use further plantings to screen fences. *Low priority.*

Other Management Issues

- Maintenance of the current mowing and slashing regime is probably the best approach at this stage.
- The weedy stretch on the north side of the creek between Dawson St and Willow Rd may need some attention.

7.4 Corhanwarrabul Creek

C1. Corhanwarrabul Creek: Henderson Rd to Stud Rd, Knoxfield/Rowville Map sheet 5; Melway Ref. 73 B9 to 72 K9

Description: This section includes the narrow, mostly continuous corridor of wattles and willows along the creek, weedy wetland vegetation along the slow-flowing open drain to the north, some planted vegetation (questionably indigenous) and an area of cleared flood plain with grass, blackberry thickets and a small amount of remnant reeds, rushes and scrub.

Habitat types present	Condition	Dominant & character species
1: Perennial stream	D	Nil
2: Perennial wetland	C,D	Water Plantain (<i>Alisma plantago-aquatica</i>), Knotweeds (<i>Persicaria decipiens</i> and <i>P. hydropiper</i>), Common Reed (<i>Phragmites australis</i>), Cumbungi (<i>Typha ?orientalis</i>)
3: Seasonal wetland	C	Rushes (<i>Juncus</i> spp.)
4: Phragmites wet grassland	C	Common Reed (<i>Phragmites australis</i>)
5: Swamp scrub	C	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	C,D	Blackwood (<i>Acacia melanoxylon</i>), Black Wattle (<i>A. mearnsii</i>), Tree Everlasting (<i>Ozothamnus ferrugineus</i>)
7: Swamp Gum forest	C,D	Swamp Gum (<i>Eucalyptus ovata</i>)

Significant Sites

The small patch of Swamp Gum forest near the Henderson Rd footbridge is probably the best remnant of this vegetation type in the Corhanwarrabul catchment (including Monbulk Creek, Ferntree Gully Creek, Ferny Creek, Corhanwarrabul Creek) within the study area.

Significant Species

Plants

Gynatrix pulchella (Hemp Bush) - two plants

Persicaria subsessilis (Hairy Knotweed) - patches in at least four places

Pomaderris aspera (Hazel Pomaderris) - one plant

Animals

Brown Goshawk

Nankeen Kestrel

Golden-headed Cisticola

Clamorous Reed Warbler

Platypus (Serena and Pettigrove, 1996)

Fauna Habitat

At least two species of birds of prey are still living in this area and utilising the existing combination of remnant and weedy vegetation.

Areas of reeds, rushes and long grasses provide habitat for the Clamorous Reed Warbler and Golden-headed Cisticola

Some Swamp Gums have hollows, and it would be desirable to augment them with nesting boxes.

Dominant or Most Potentially Damaging Weeds

willows (*Salix* spp.)

Desert Ash (*Fraxinus angustifolia*)

Blackberry (*Rubus discolor*)

Wandering Jew (*Tradescantia albiflora*)

Gorse (*Ulex europaeus*)

Toowoomba Canary Grass (*Phalaris aquatica*)

Rehabilitation Opportunities

- Improve wetland vegetation along the slow-flowing drain, preferably by enabling existing indigenous vegetation to spread. This would be labour intensive and require work by skilled operators. *Moderate priority.*
- Where possible, allow Common Reed and Swamp Paperbark to spread by excluding mowing. *Moderate to high priority.*
- Remove Desert Ash and willows. *Moderate importance, not urgent.*
- Protect remnant Swamp Gums near the Henderson Rd footbridge. *High priority.*

Opportunities for Community Education, Interpretation and Participation

If wetland improvement works are undertaken along the drain in the north of this section, signs along the path running parallel to it could be used to promote community awareness of wetlands and habitat.

7.5 Blind Creek

B1. Blind Creek: Himalaya Rd to Forest Rd, Ferntree Gully Map sheet 8; Melway Ref. 74 E1 & D1

Description: Relatively steep, upper reaches of the creek, much of it in suburban back yards. A small area behind 1 Rona St and the section between Moore St and Forest Rd are public open space, including a reserve at the corner of Forest Rd and Rylstone St. A significant number of old trees remain, but they are not able to reproduce effectively. The understorey has been mostly replaced by gardens and weeds.

Habitat types present	Condition	Dominant & character species
1: Perennial & non-perennial sections of stream	D	Nil
7: Swamp Gum forest	C,D	Swamp Gum (<i>Eucalyptus ovata</i>)
12: Bundy-Messmate-Peppermint forest	C,D	Bundy (<i>Eucalyptus goniocalyx</i>), Messmate Stringybark (<i>E. obliqua</i>), Narrow-leafed Peppermint (<i>E. radiata</i>)

Significant Plant Species

Acacia leprosa (Cinnamon Wattle)

Pomaderris aspera (Hazel Pomaderris)

Prostanthera lasianthos (Victorian Christmas Bush) -Several plants near and above Perra St

Fauna Habitat

The tree canopy provides an almost continuous corridor, which is important for bird movement. There are also many mature eucalypts and some of them may have hollows to provide sites for nesting and roosting.

Dominant or Most Potentially Damaging Weeds

Some of the most severe environmental weeds present have been planted as ornamental species. They include Pampas Grass (*Cortaderia selloana*) (several plants on the northern boundary of 30 Perra St), Sweet Pittosporum (*Pittosporum undulatum*), willows (*Salix* spp.), Ivy (*Hedera helix*), Cotoneaster (*Cotoneaster glaucophyllus*), Honeysuckle (*Lonicera japonica*), Cape Wattle (*Paraserianthes lophantha*) and Desert Ash (*Fraxinus angustifolia*). Other very damaging weeds present are Blackberry (*Rubus discolor*), Wandering Jew (*Tradescantia albiflora*), Creeping Buttercup (*Ranunculus repens*), Kikuyu (*Pennisetum clandestinum*) and Montpellier Broom (*Genista monspessulana*).

Revegetation/Rehabilitation Opportunities.

- Although there are many mature indigenous trees on private property, there is no natural regeneration. Residents should be informed of the importance of these trees to fauna, congratulated on their retention and encouraged to plant young specimens to take the place of the old ones as they die out over time.

- The Council-owned sections on the northern boundary of 1 Rona St and between Moore St and Forest Rd contain severe Sweet Pittosporum infestations and some willows. These should be removed and replaced with appropriate eucalypts (selected from those present in the area and depending on the proximity to the creek), Blackwood (*Acacia melanoxylon*), Victorian Christmas Bush, Sweet Bursaria (*Bursaria spinosa*) and Kangaroo Apple.
- The section of waterway just east of Forest St is an excellent candidate for revegetation with all strata of riparian vegetation. Plants such as Tall Sedge (*Carex appressa*) and Hop Goodenia (*Goodenia ovata*) should be used to replace weedy species. The young Cape Wattle in the creek should be removed as a matter of priority before it produces immense crops of seed which would be dispersed by water flow.

Other Management Issues

Substantial quantities of lawn clippings and prunings are being dumped over the Perra St fence into the creek gully. Young Agapanthus plants are becoming established there. The Agapanthus may be dumped or growing from wind-borne seed.

Opportunities for Community Education, Interpretation and Participation

- The privately owned section of the waterway provides a perfect opportunity to establish a neighbourhood 'creek care' group. A meeting of residents and Knox Environment Society members might be arranged on a Saturday morning to allow discussion and a free exchange of information, from which the community and environment would benefit (and KES might gain new members).
- Environmental Weed brochures and Control Sheets should be distributed to all residents to increase awareness.
- Offer Council assistance in the preparation of a joint Land for Wildlife application.
- Advice or even assistance could be given to the resident at 30 Perra St in Pampas Grass removal. Red-fruit Saw-sedge (*Gahnia sieberiana*) could be offered as a replacement and the resident informed of the Swordgrass Brown butterfly's dependence on this species.
- Council might provide a program to offer a plant of similar kind for any environmental weed removed - e.g. indigenous berry plants (Kangaroo Apple and Prickly Currant-bush) for the removal of exotic berry plants such as Cotoneasters, Firethorns (*Pyracantha* spp.) and Sweet Pittosporum. It might be necessary for Council to arrange special 'green waste' pick ups for participating residents.
- Council could supply 'gift packs' of half a dozen plants (tubestock from the Operation Revegetation nursery to ensure local genetic integrity) to each resident as a part of a Corridor Links program.

B2. Blind Creek: Forest Rd to Underwood Rd, Ferntree Gully Map sheet 8; Melway Ref. 74 D 1 to 74 B/C 1

Description: Private and public ownerships. Only vestiges of natural vegetation remain. Much of the creek is underground.

Habitat types present	Condition	Dominant & character species
5: Swamp scrub	D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>)
12: Bundy-Messmate- Peppermint forest	C,D	Bundy (<i>Eucalyptus goniocalyx</i>), Narrow-leafed Peppermint (<i>E. radiata</i>)

Dominant or Most Potentially Damaging Weeds

willows (*Salix* Spp.)

Kikuyu (*Pennisetum clandestinum*)

other introduced grasses

Revegetation Opportunities

The creek banks in the Chatham Av reserve should be planted with indigenous species, after removal of willows and planted exotics such as roses and Belladonnas. Canopy species planted should include Narrow-leaf Peppermint, Bundy and Blackwood. Shrubby species should include Victorian Christmas Bush (*Prostanthera lasianthos*), Kangaroo Apple (*Solanum laciniatum*), Prickly Currant-bush (*Coprosma quadrifida*) and Sweet Bursaria (*Bursaria spinosa*). Ground flora should include Spiny-headed Mat-rush (*Lomandra longifolia*), Bidgee-widgee (*Acaena novae-zealandiae*) (for erosion control on creek edge), Hop Goodenias (*Goodenia ovata*), Purple-sheath Tussock-grass (*Poa ensiformis*) and Red-fruit Saw-sedge (*Gahnia sieberiana*).

Other Management Issues

- Dual occupancies and units cause a complete break in the tree canopy at 11 & 13 Veronica St, and it is extremely likely that No 9 will be similarly developed. Since landscape plans are required by the Town Planning Department for such developments, every effort should be made to ensure that some indigenous trees are included in the proposed planting. It is very likely that there will be no room for eucalypts on such sites, so Blackwoods, Victorian Christmas Bush, Hop Goodenia and Hop Wattle (*Acacia stricta*) offer reasonable alternatives. Site design must allow room for at least one tree; even then, the amenity of the area is compromised and the corridor links weakened in the extreme.
- There are some outstanding eucalypts on private properties - 11 & 12 Chatham Av for example - whose owners deserve congratulations on their retention. Perhaps a register of outstanding indigenous trees could be established to give owners appropriate recognition.
- There is a healthy, continuous canopy of trees between Underwood Rd and the adjacent railway line. Maintenance and rehabilitation could be a topic for discussion between Council and the Public Transport Corporation to ensure that the significance of this vegetation is acknowledged and protection measures are enacted.

Opportunities for Community Education, Interpretation and Participation

- The replanting of the Chatham Av reserve should be a community planting, perhaps for Arbor Day or the Spring Planting Festival, so residents can understand why planted ornamentals are being removed. The plants listed above for planting in this site all have special habitat value,

and the uses of each by local mammals, birds and butterflies could be explained as part of the planting day activities.

- It may be possible to establish a 'railway links' group composed of residents along Underwood Rd to assist in the management of the vegetation which screens them from the railway line and adds to the attractiveness (and therefore to the real estate value) of their neighbourhood.

B3. Blind Creek: Underwood Rd to Dorset Rd (including Tim Neville Arboretum) Map sheet 8; Melway Ref. 74 B1 & A1

Description: The entirety of this portion of the creek has been piped underground and much of it passes through back yards. Much of the original vegetation has been replaced by planted exotics, but there are still a few patches of indigenous trees. A few very large and old Yellow Box (*Eucalyptus melliodora*) remain, next to Dorset Rd.

Habitat types present	Condition	Dominant & character species
2: Perennial wetland	C	Cumbungi (<i>Typha</i> spp.), Tall Spike-rush (<i>Eleocharis sphacelata</i>)
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>)
10: Silver-leafed Stringybark & Swamp Gum forest	D	Silver-leafed Stringybark (<i>E. cephalocarpa</i>)
12: Bundy-Messmate-Peppermint forest (sometimes verging on Riparian forest)	C,D	Messmate Stringybark (<i>Eucalyptus obliqua</i>), Bundy (<i>E. goniocalyx</i>), Narrow-leaf Peppermint (<i>E. radiata</i>); also some Red Stringybark (<i>E. macrorhyncha</i>), Yellow Box (<i>E. melliodora</i>) and Manna Gum (<i>E. viminalis</i>)

Significant Species

A shallow drainage line on the north side of the closed roadway accommodates one Victorian Christmas Bush and provides an ideal location for the planting of more.

Dominant or Most Potentially Damaging Weeds

The major weed species appearing within the very fragmented indigenous canopy is Sweet Pittosporum (*Pittosporum undulatum*). Numerous other species occur on the frontage of 7 Williamson Cres and the northern boundary of 48 Francis Cres. There is little which can be done to control such weeds on private property other than encouraging the owners to remove them (or at least the female plants). Offering replacement indigenous species and assisting with the removal of the 'green waste' generated by removal may provide some incentive.

Fauna Habitat

The closed roadway between Williamson Rd and Francis Cres contains some large Yellow Box and Messmate Stringybarks, providing a wildlife corridor to 7 Williamson Cres which has a

few large Messmate Stringybarks and Narrow-leaf Peppermints. These mature trees will provide a haven for visiting and resident indigenous birds and mammals despite the weedy understorey.

The lakes at the arboretum provide potentially good habitat for waterfowl, but the heavy use of the area by the public causes considerable disturbance to birds.

Revegetation/Rehabilitation Opportunities

- Encourage people to remove weed species and plant indigenous plants, particularly along the creek line vegetation corridor. Residents may not be aware of the importance of their blocks (some with only one indigenous tree) to the overall corridor system in Knox and beyond. Having a basic understanding of the concepts and issues involved may make people more willing to do a little to improve the whole.
- There are still some good Messmate Stringybarks at 44 and 46 Francis Cres and scattered eucalypts all along the creek line. Filling the gaps in the tree canopy is quite feasible.
- 15 Prince St (Council reserve?) has a fine group of eucalypts and Blackwoods, but the area is mown and there is no possibility of seedling recruitment. A Council Parks staff member should walk this area periodically prior to mowing and stake all regrowth so mower operators can avoid it.
- Remove non-indigenous species along the Briar St drainage line and the main creek line across the northern end of the arboretum and link the remaining indigenous trees with cluster plantings of appropriate eucalypts, Blackwoods, Black Wattles (*Acacia mearnsii*) (only 2-3 trees in each cluster) and understorey species such as Flax Lilies (*Dianella* spp.), Saw-sedges (*Gahnia* spp.) and Spiny-headed Mat-rush (*Lomandra longifolia*).
- Plant more water plants such as Cumbungi and rushes (*Juncus* spp.) around the margins of the lakes to provide more protection for waterfowl.

Other Management Issues

- The magnificent old Yellow Box trees near the north-west corner of the arboretum are not able to reproduce because of the current mowing regime. Seed should be collected when available (usually between November and March, ideally following a wind storm that brings branches down) so that young stock can be produced for use in replanting here and elsewhere. Collection may require a travel tower, but the genetic value of these superb trees justifies the effort and expense, particularly if collecting can be attempted when a travel tower is scheduled for work in an area nearby.
- Plantings and regrowth are being vandalised near northern boundary of arboretum.
- Children and dogs are chasing ducks around the lakes.

Opportunities for Community Education and Participation

- Signs stating that dogs must be kept on leads could be positioned near the arboretum car park to reduce the incidence of waterfowl disturbance.
- Information signs could be displayed near the lakes, with illustrations of the different birds which may use the area and explaining the habitat value of permanent water bodies.

B4. Blind Creek: Dorset Rd to Wattle Tree Rd, Ferntree Gully

Map sheet 9; Melway Ref. 64 K12 to 64 J11

Description: This part of the creek is entirely piped underground, with a channel covered by mown exotic grasses above. Only small patches of the original vegetation remain, supplemented by plantings of indigenous and non-indigenous native species.

Habitat types present	Condition	Dominant & character species
3: Seasonal wetland	D	Common Reed (<i>Phragmites australis</i>)
5: Swamp scrub	C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>), Tree Everlasting (<i>Ozothamnus ferrugineus</i>)
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>), Blackwood (<i>Acacia melanoxylon</i>)

Significant Trees

Two old Swamp Gums with hollows in the rear of 12 Edina Rd, the habitat values of which the property owners should be made aware. No tree surgery, trenching, equipment or materials storage, or any other form of disturbance should be permitted. The owners and/or lessee should be requested to discuss proposals which may cause any degree of disturbance to the trees with Council.

Fauna Habitat

Melaleuca thickets behind 11 and 15 Esther Court provide shelter for small birds. There are very few Swamp Gums with hollows: one near the western boundary of 39 Aubrey Grove, one near the north end of a Council owned property on Edina Rd and the two previously mentioned at 12 Edina Rd.

Dominant or Most Potentially Damaging Weeds

The main weed infestation is behind 16-18 Esther Court, where Pampas Grass (*Cortaderia selloana*), willows (*Salix* spp.) and Blackberry (*Rubus discolor*) should be removed.

A magnificent Silver-leaf Stringybark (*Eucalyptus cephalocarpa*) on the north side of the creek and adjacent to Dorset Rd will be smothered by Ivy (*Hedera helix*) unless the weed is effectively controlled.

A Desert Ash (*Fraxinus angustifolia*) about 50 metres west of Dorset Rd should be removed (not mistaking it for the harmless Claret Ash (*Fraxinus rotundifolia* subsp. *oxycarpa* 'Raywood') about 15 m further south-west).

Revegetation/Rehabilitation Opportunities

- The thickets of Swamp Paperbark (*Melaleuca ericifolia*) behind 11, 12 and 15 Esther Court should be permitted to expand through preventing any further slashing of their sucker growth.
- There is a large mown area behind 10-18 Esther Court which could be revegetated. This north-eastern side of the creek is almost devoid of eucalypts, giving it a particularly unnatural and stark appearance. We advise cluster planting of Swamp Gums or Manna Gums in groups of

three around 10 metres apart, within plantings of shrubby species such as Tree Everlasting (*Ozothamnus ferrugineus*), Swamp Paperbark, Prickly Currant-bush (*Coprosma quadrifida*), Kangaroo Apple (*Solanum laciniatum*) and Sweet Bursaria (*Bursaria spinosa*).

- There is almost no indigenous vegetation on either side of the creek behind 40 Edina Rd. The planting of clusters of Swamp Gums, Blackwoods and Swamp Paperbarks would assist in restoring continuity to the vegetation corridor.
- Non-indigenous species should be removed and replaced with indigenous species.

Other Management Issues

Many of the planted eucalypts, particularly towards Wattle Tree Rd seem to be unusually prone to insect infestation, which may indicate inappropriate genetic stock. The healthiest eucalypts in this area are those which occur naturally. Excessive insect infestation may also occur because of the general scarcity of eucalypts. All future plantings should be of locally derived stock.

Opportunities for Community Education, Interpretation and Participation

Very little at this stage, although consultation with residents at 10-18 Esther Court would be advisable prior to planting behind their properties to discover their current usage and expectations of their local open space.

B5. Blind Creek: Wattle Tree Rd to Rankin Rd, Ferntree Gully (including Blind Ck Billabong)

Map sheet 9; Melway Ref. 64 J11 to 64 H11

Description: The original creek alignment still exists through this section, but low flow pipes have been installed on the south side. The public land and adjacent quarry contain substantial areas of remnant vegetation. There are also extensive mown areas and some patches of severe weed infestation. A full description of the most significant vegetation is given in the companion report, 'Management Plan for Blind Creek Billabong, Ferntree Gully'.

Habitat types present	Condition	Dominant & character species
3: Seasonal wetland (incl. non-perennial stream)	B-D	Rushes (<i>Juncus</i> spp.), Cumbungi (<i>Typha orientalis</i>), Soft Twig-rush (<i>Baumea rubiginosa</i>), Fen sedge (<i>Carex ?gaudichaudiana</i>)
5: Swamp Scrub	C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	C,D	Blackwood (<i>Acacia melanoxylon</i>)
6: Riparian forest (a few trees)	D	Manna Gum (<i>E. viminalis</i>)
7: Swamp Gum forest	B-D	Swamp Gum (<i>Eucalyptus ovata</i>), Black Wattle (<i>Acacia mearnsii</i>)

Habitat types present	Condition	Dominant & character species
10: Silver-leafed Stringybark & Swamp Gum forest	B-D	Silver-leafed Stringybark (<i>Eucalyptus cephalocarpa</i>), Swamp Gum, Blackwood (<i>Acacia melanoxylon</i>), Black Wattle
12: Bundy-Messmate forest	C,D	Messmate Stringybark (<i>E. obliqua</i>), Bundy (<i>E. goniocalyx</i>)

Significant Site

The Blind Creek Billabong site and the adjacent Swamp Gum forest are of botanical significance at the Municipal level (i.e. within the context of the City of Knox). They contain eight regionally significant plant species and ten that are significant at the Municipal level. The presence of around 100 indigenous plant species also stands out at the Municipal level.

Significant Plant Species

Regionally significant

- Baumea acuta* (Pale Twig-rush) - two or three plants
- Baumea rubiginosa* (Soft Twig-rush) - two dense patches and a few additional plants
- Carex gaudichaudiana* (Fen Sedge) - five or six plants, threatened by trampling
- Goodenia elongata* (Lanky Goodenia) - one patch (probably one plant)
- Gratiola pubescens* (Glandular Brooklime) - a few plants
- Lepidosperma gunnii* (Slender Sword-sedge) - a few plants
- Schoenus tesquorum* (Soft Bog-rush) - only one plant seen
- Villarsia reniformis* (Running Marsh-flower) - about ten plants in one colony

Significant at the Municipal level

- Centrolepis strigosa* ssp. *strigosa* (Hairy Centrolepis) - many plants scattered sparsely
- Empodisma minus* (Spreading Rope-rush) - a tiny patch, but much more on quarry land
- Gonocarpus micranthus* (Creeping Raspwort) - a few plants
- Goodenia humilis* (Swamp Goodenia) - many plants
- Hypoxis hygrometrica* var. *hygrometrica* (Golden Weather-glass) several remains of plants
- Imperata cylindrica* (Blady Grass) - one plant
- Leptospermum lanigerum* (Woolly Tea-tree) - one plant on the boundary with the quarry
- Muellerina eucalyptoides* (Creeping Mistletoe) - one plant
- Prostanthera lasianthos* var. *lasianthos* (Victorian Christmas-bush) - over one dozen plants
- Triglochin striatum* (Streaked Arrow-grass) - one patch

In addition, the following is of equivocal significance:

- Acacia leprosa* (Cinnamon Wattle) - three plants just west of Wattle Tree Rd, at least one of which was probably planted.

Fauna Habitat

There is a scattering of Swamp Gums with hollows along this stretch of the waterway, including one dead specimen near the tennis court pavilion which has been cut back for safety and stability but otherwise carefully preserved for its habitat values.

Dominant or Most Potentially Damaging Weeds

- Japanese Honeysuckle (*Lonicera japonica*)
- Cape Ivy (*Delairea odorata*)
- Pampas Grass (*Cortaderia selloana*)
- West Australian Bluebell Creeper (*Sollya heterophylla*)
- Monterey Pine (*Pinus radiata*)
- Boneseed (*Chrysanthemoides monolifera*)
- Montpellier Broom (*Genista monspessulana*)
- Sweet Pittosporum (*Pittosporum undulatum*)
- Periwinkle (*Vinca major*)
- exotic grasses including:
 - Kikuyu (*Pennisetum clandestinum*)
 - Toowoomba Canary-grass (*Phalaris aquatica*)
 - Brown-top Bent (*Agrostis capillaris*)
 - Couch (*Cynodon dactylon*)

Revegetation/Rehabilitation Opportunities

The most important opportunities and suggested actions are included in the Blind Creek Billabong Management Plan. The following apply outside the area covered by that management plan.

- Remove *Watsonia*, Sweet Pittosporum and Pampas Grass from the area of Swamp Gum forest between Blind Creek Billabong and the creek. *High priority.*
- A track has been created where children ride bikes back and forth through the creek, 100 m west of the end of Springfield Rd. The track does not lead anywhere but is causing considerable damage, so it should be fenced off and the damaged area rehabilitated. *Moderate priority.*
- Scatter planting of eucalypts on both sides of path behind 22-30 Agora Blvd to help restore lost canopy and provide young stock in an area where no seedling recruitment is occurring because of regular mowing. *Moderate priority.*
- General weed removal and replacement with indigenous species along waterway, at the same time broadening the vegetation corridor in places where it is particularly narrow. *Moderate priority.*
- The break in the eucalypt canopy along the creek south of Springfield Rd should be restored with planting. *Moderate priority.*
- The numerous young Desert Ash (*Fraxinus angustifolia*) around the culvert about 50 m east of Rankin Rd should be removed before they start to produce seed in three to five years time.
- The Firethorn (*Pyracantha* sp.) should be removed from the Hazelwood Rd informal car park opposite the tennis courts. *Moderate priority.*
- A recently but not very successfully planted low area north of Jacobus Walk would be better converted into a permanent wetland to increase the habitat value of the site. *Low priority.*
- Remove pines, particularly south of 11 Maryborough Rd, if practicable. *Low priority.*
- The comparatively broad reserve area between Rankin Rd and the eastern boundary of the quarry land has enormous potential for regeneration and habitat restoration in general.

Other Management Issues

- Car parking off Hazelwood Rd, opposite the tennis courts, will have a detrimental effect on the root systems of the old Swamp Gums in the immediate area and is also a focus for rubbish dumping. The car park should be somewhat formalised by the placement of barriers at least 2 m from the trunks of trees to minimise damage to trunks and to remaining understorey plants still clinging to life at the base of some trees.
- Extending of gardens into the reserve behind 13 Elder Grove and 59 Rankin Rd should be discouraged and the exotic plants removed.

Opportunities for Community Education, Interpretation and Participation

- Where weed removal and replanting is to proceed along the creek margins, particularly towards the Wattle Tree Rd end of this section, adjoining residents should be informed of the proposed works and invited to participate in the planting. Those at 2-30 Agora Boulevard may have expectations that broad areas of mown grass will remain, given the existing situation, and their views should be sought on the planting. Younger family members may wish to 'adopt' a particular tree or group of trees and water them during the subsequent summer.
- Given the broad reserve area between Rankin Rd and the quarry land, and the diversity of tree species, it should be possible to prepare a nature trail with signs to help people identify the different species and vegetation types.

B6. Blind Creek: Rankin Rd to Scoresby Rd, Ferntree Gully, including Fairpark Reserve

Map sheet 9; Melway Ref. 64 H11 to 64 E11

Description: This portion of Blind Creek is entirely piped underground, with a mown, grassed channel above. Remnant vegetation is vestigial and most of the trees present are from other parts of Australia.

Habitat types present	Condition	Dominant & character species
6: Riparian forest (a few trees)	D	Manna Gum (<i>E. viminalis</i>)
7: Swamp Gum forest	C	Swamp Gum (<i>Eucalyptus ovata</i>)

Significant Plant Species

Danthonia geniculata (Kneed Wallaby-grass)

Fauna Habitat

There are several trees with hollows along this section of waterway and there are nesting boxes on two Yellow Box (*Eucalyptus melliodora*) behind 22 Benbow Crescent.

Dominant or Most Potentially Damaging Weeds

- Willow (*Salix* sp.)
- Ivy (*Hedera helix*)
- Loquat (*Eryobotrya japonica*)
- Willow Hakea (*Hakea salicifolia*) - planted

Revegetation Opportunities

- Planting of individual trees in the area behind 16-24 Benbow Crescent to form a continuous canopy would improve the habitat value of this site.

Opportunities for Community Education, Interpretation and Participation

There are two magnificent Swamp Gums with hollows in the grounds of the kindergarten at the north-east corner of Fairpark Reserve which provide a wonderful opportunity for the introduction of a nature appreciation program. The Gould League produces numerous publications, such as 'Why is a Gum Tree', 'Secrets: At the Park' and 'First Flight' which could be used by the kindergarten teachers to instil a basic understanding and appreciation of natural history in their charges.

B7. Blind Creek: Scoresby Rd to footbridge at rear of the Institute for Horticultural Development, Knoxfield Map sheet 10; Melway Ref. 64 D&E 11

Description: There is an almost continuous eucalypt canopy, which provides much better bird habitat than the sections immediately east and west. The adjacent Pines Golf Park, Institute of Horticultural Development, and Knox Community Garden & Vineyard, add substantially to its habitat value. The whole section has a natural ambience and it provides habitat for small birds and probably mammals.

Habitat types present	Condition	Dominant & character species
1: Perennial stream		Nil
3: Seasonal wetland	D	Slender Knotweed (<i>Persicaria decipiens</i>)
6: Riparian forest	B,C	Manna Gum (<i>E. viminalis</i>), Swamp Gum (<i>Eucalyptus ovata</i>), Blackwood (<i>Acacia melanoxylon</i>), Black Wattle (<i>A. mearnsii</i>)
7: Swamp Gum forest	C	Swamp Gum (<i>Eucalyptus ovata</i>), Silver Wattle (<i>Acacia dealbata</i>), Black Wattle (<i>A. mearnsii</i>)

Significant Plant Species

- Acacia leprosa* (Cinnamon Wattle) - two plants
- Gynatrix pulchella* (Hemp Bush) - two plants
- Persicaria subsessilis* (Hairy Knotweed) - scattered along the creek below Community Garden
- Prostanthera lasianthos* (Victorian Christmas Bush) - one plant

Fauna Habitat

Old Swamp Gums with hollows are quite numerous.

The large dam near the northern boundary of the Institute for Horticultural Development provides waterfowl habitat and suffers little disturbance because it is isolated from the creek corridor by a high chain mesh fence.

Dominant or Most Potentially Damaging Weeds

Blackberry (*Rubus discolor*)

Flax-leaf Broom (*Genista linifolia*)

Box Elder Maple (*Acer negundo*)

exotic grasses including:

Cocksfoot (*Dactylis glomerata*)

Kikuyu (*Pennisetum clandestinum*)

Panic Veldt-grass (*Ehrharta erecta*)

Revegetation/Rehabilitation Opportunities

- A path has been bulldozed through the riparian forest, about 140 metres west of Scoresby Rd. Felled trees, dumped fill and chunks of concrete should be removed and the area replanted, particularly with a dense sward of Weeping Grass (*Microlaena stipoides*) and Veined Spear-grass (*Stipa rudis*), to minimise weed growth while the regenerating Blackwoods, eucalypts and Hop Goodenias (*Goodenia ovata*) grow. *High priority.*
- Remove blackberries and replace with equivalent indigenous prickly plants such as Sweet Bursaria (*Bursaria spinosa*) so that small bird habitat is not lost when weeds are removed.
- Plant eucalypts and Blackwoods to fill in small gaps in canopy along edge of creek at rear of the Institute for Horticultural Development.
- Weed control in the seasonal wetland and perhaps a small amount of excavation would add further diversity to an already interesting section of linear reserve.

Other Management Issues

If any further drainage works are planned, they should be undertaken with care to avoid damage and unnecessary tree loss. The recent works described above were quite inappropriate and higher standards should be required in future.

Opportunities for Community Education, Interpretation and Participation

- The diversity of bird life to be seen here invites the designation of a 'bird-lover's lane' with an interpretive sign (or notice board) just off Scoresby Rd showing some of the birds which may be seen and a little information about each.
- Contact the managers of the Pines Golf Park to promote habitat improvement on their land. With a little prompting and assistance, they may be willing to plant more trees and shrubs, and tell their patrons why they are doing so.

B8. Blind Creek: Knox Community Garden and Vineyard, Boronia

Map sheet 10; Melway Ref. 64 D11

This bushland remnant occupies a fairly steep, south-facing hill at the southern end of the property, abutting and forming a tree canopy continuum with the Swamp Gum forest on the north side of Blind Creek. Although parts are extremely severely weed invaded, the central area still contains some quite good quality vegetation of a type that is becoming scarce due to urban development.

Habitat types present	Condition	Dominant & character species
13: Yellow Box & Bundy forest	B,C	Yellow Box (<i>Eucalyptus melliodora</i>) & Bundy (<i>E. goniocalyx</i>), with some Narrow-leaf Peppermint (<i>E. radiata</i>)
7: Swamp Gum forest	C,D	Swamp Gum (<i>Eucalyptus ovata</i>)

Significant Species

Allocasuarina littoralis (Black Sheoak) - possibly planted

Fauna Habitat

The dense, continuous eucalypt canopy helps to provide shelter for small birds.

Welcome Swallows and Willie Wagtails were observed feeding on insects in the cleared area just north of the remnant vegetation.

There is one old Swamp Gum with hollows at the eastern end of the main block of remnant vegetation.

Dominant or Most Potentially Damaging Weeds

The major weed present is Blackberry (*Rubus discolor*), which occupies about 50% of the site and forms an impenetrable thicket through the western one-third (approximately). Numerous other very invasive weeds are present in varying quantities, including:

Cotoneaster (*Cotoneaster glaucophyllus*)

Periwinkle (*Vinca major*)

Monterey Pine (*Pinus radiata*)

Cleavers (*Galium aparine*)

various exotic grasses including:

Sweet Vernal Grass (*Anthoxanthum odoratum*)

Quaking Grass (*Briza maxima*)

Cocksfoot (*Dactylis glomerata*)

Panic Veldt-grass (*Ehrharta erecta*)

Kikuyu (*Pennisetum clandestinum*)

Several planted non-indigenous native species have spread into the remnant vegetation and are cause for concern:

Cootamundra Wattle (*Acacia baileyana*) - several specimens

Cedar Wattle (*A. elata*)

Gosford Wattle (*A. prominens*) - particularly rampant

Spotted Gum (*Eucalyptus maculata*) - not spreading at the moment, but may hybridise with the indigenous species, destroying their value as a genetic resource.

Rehabilitation Opportunities

This site has enormous potential as a viable and valuable contributor to the Blind Creek vegetation corridor.

- Immediate control of Blackberry is a very high priority, both on this site and along the creek bank downstream. Replace with Sweet Bursaria (*Bursaria spinosa*) and Prickly Currant-bush (*Coprosma quadrifida*) to retain prickly shrub layer habitat for small birds.
- Ringbark escaped Wattle spp. and Pines to allow regeneration of desirable species.
- Remove Spotted Gums to prevent hybridisation.

Other Management Issues

Soil has been recently bulldozed into the remnant vegetation along its northern boundary. This damaging process should cease immediately.

Opportunities for Community Education, Interpretation and Participation.

Since this is a community garden, it may be possible to gain the interest of some plot-holders in the restoration of the remnant bushland after some major Blackberry removal has been undertaken. There are interesting birds to be observed in the area, and many of the small birds act as biological insect control for the gardeners. Organising an afternoon meeting of plot-holders with an individual who has a thorough knowledge of local flora and fauna may be beneficial in sparking an interest among a group of people who obviously already enjoy outdoor activities.

B9. BMX track off Wadhurst Dr, Boronia

Map sheet 10; Melway Ref. 64 C&D 11

This small site just west of Knox Community Garden and Vineyard is mainly devoted to a BMX track but still contains some remnant vegetation in quite reasonable condition, particularly near the north-western corner. The western side, particularly the north-western corner, has a good diversity of ground flora and enormous potential for restoration without much work.

Habitat types present	Condition	Dominant & character species
7: Swamp Gum forest	C	Swamp Gum (<i>Eucalyptus ovata</i>), Blackwood (<i>Acacia melanoxylon</i>)
13: Yellow Box & Bundy forest	B,C,D	Yellow Box (<i>Eucalyptus melliodora</i>) & Bundy (<i>E. goniocalyx</i>)

Dominant or Most Potentially Damaging Weeds

Blackberry (*Rubus discolor*)
Brown-top Bent (*Agrostis capillaris*)

- Toowoomba Canary Grass (*Phalaris aquatica*)
- Sweet Vernal Grass (*Anthoxanthum odoratum*)
- Large Quaking Grass (*Briza maxima*)
- Bluebell Creeper (*Sollya heterophylla*) - a large plant in the best section of vegetation
- Gorse (*Ulex europaeus*)
- Monterey Pine (*Pinus radiata*) - one young tree which could be easily removed

Revegetation/Rehabilitation Opportunities

- A small bush regeneration team could achieve excellent results here in just two days by removing some of the woody weeds and spraying other, mainly grassy, weeds.
- Stop slashing north-western corner - Common Heath (*Epacris impressa*), Blackwoods, Kangaroo Grass (*Themeda triandra*), Veined Spear-grass (*Stipa rudis*) and other species being damaged. Note guidelines in Section 6.4, p.36.
- A recent fire through the south-east corner of the site has resulted in very good regeneration of Kangaroo Grass and densely resprouting Hop Wattle (*Acacia stricta*). (Blackberries are also regrowing, but would be easily controlled through spot spraying.) A burn in the north-west corner may have similar positive results.
- Site is too isolated currently and needs stronger links to corridor through planting.

Other Management Issues

Axe damage to some trees.

Opportunities for Community Education, Interpretation and Participation

If there is a club or informal group of users associated with this track, parents may be interested in helping to maintain the area. (They could also keep a surreptitious eye on their kids' activities without interfering.)

B10. Blind Creek: Footbridge at rear of the Institute for Horticultural Development to Lewis Rd, Knoxfield and Boronia

Map sheet 10; Melway Ref. 64 C&D 11 to 64 E11

This portion of Blind Creek is undergrounded with mown grass above and plantings, of indigenous (probably non-local stock) and non-indigenous native species, along the sides. There is almost no indigenous vegetation remaining.

Habitat types present	Condition	Dominant & character species
5: Swamp scrub	D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>) (one tree only)
13: Yellow Box & Bundy forest (but without Yellow Box)	C	Bundy (<i>E. goniocalyx</i>)

Significant Species

Thelymitra holmesii (Slender Blue Swamp Sun-orchid)

Veronica gracilis (Slender Speedwell)

Dominant or Most Potentially Damaging Weeds

Planted non-indigenous species such as Gippsland Bog Gum (*Eucalyptus kitsoniana*) (which hybridises with Swamp Gums, rendering them worthless as a source of seed for regeneration) should be removed.

Revegetation/Rehabilitation Opportunities

- Replace non-indigenous species with indigenous ones.
- Allow expansion of swamp scrub and native grass areas by stopping slashing.
- Fence off tiny remnant of Bundy forest to prevent further damage by bikes and pedestrians and monitor to see if understorey species regenerate.

Opportunities for Community Education, Interpretation and Participation

Opportunities are currently very limited. Replanting to improve wildlife habitat between Scoresby Rd and the footbridge may inspire local birdwatchers or conservation groups if presented in an imaginative manner.

B11. Lewis Park (Lewis Road Reserve), Wantirna South

Map sheet 10; Melway Ref. 64 B10

This large park has a mown retarding basin, three sports ovals with associated car parks and pavilions, a skateboard facility, a Scout/Guide hall, areas of mown grass, patches of remnant vegetation and planted beds of indigenous and non-indigenous species. Blind Creek is piped underground throughout.

Habitat types present	Condition	Dominant & character species
5: Swamp scrub	C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
7: Swamp Gum forest	C,D	Swamp Gum (<i>Eucalyptus ovata</i>)

Significant Plant Species

Alternanthera denticulata (Lesser Joyweed) - quite a few scattered patches, most being mown

Hemarthria uncinata (Mat Grass) - quite a few scattered patches, most being mown

Poa labillardierei (Common Tussock-grass -) - about half a dozen tussocks

Thelymitra ?holmesii (Sun-orchid) - identity unconfirmed (50% probability)

?*Cyperus gunnii* (Flat Sedge) - Probably native and probably significant, but positive identification was not possible because no reproductive material was available.

Fauna Habitat

The large, dense patches of Swamp scrub provide habitat for small birds and reptiles, and possibly mammals.

Swamp Gums near the south-eastern oval have hollows, but they appear to be in use by the pest species Common (Indian) Myna, which aggressively defends them against use by native species such as the Crimson and Eastern Rosellas and Rainbow Lorikeets, which were seen in the area.

Dominant or Most Potentially Damaging Weeds

Pampas Grass (*Cortaderia selloana*)

Desert Ash (*Fraxinus angustifolia*)

Ivy (*Hedera helix*) - among Swamp scrub near northern boundary of park

Wandering Jew (*Tradescantia albiflora*)

exotic grasses including:

Panic Veldt-grass (*Ehrharta erecta*)

Brown-top Bent (*Agrostis capillaris*)

Kikuyu (*Pennisetum clandestinum*)

Water Couch (*Paspalum distichum*)

Yorkshire Fog (*Holcus lanatus*)

Rehabilitation Opportunities

- Swamp Paperbark suckers are being slashed around the edges of many patches of Swamp scrub which should be left to expand naturally.
- The significant Flat Sedge is being slashed, along with other species in the comparatively large vegetation remnant near the south boundary of the site. The mowing regime for this part of the site should be suspended while suitably qualified people mark out with stakes the sections which should not be slashed.
- A small area of mown grasses and herbs about 100 metres south of Berkley St, between a patch of Swamp scrub and a planted bed, contains numerous indigenous species and could be developed as a regeneration area if the *Paspalum* (*Paspalum dilatatum*) was sprayed out and indigenous herbs substituted.

Other Management Issues

- Many inappropriate species have been planted in the past and this practice should cease.
- Large quantities of plastic bags seem to accumulate in some patches of Swamp scrub. The plastic and other rubbish should be removed.

Opportunities for Community Education, Interpretation and Participation

Scouts/guides could be given information and instruction on basic bush regeneration and be allotted areas to care for as part of their environmental activities and possibly as part of the work required for the gaining of their environment badge. They could also be provided with a few Gould League posters such as 'Urban Birds' and 'Common Insects of Australia' and an 'Environmental Log Book' (all inexpensive publications) so they could monitor wildlife in the area.

B12. Blind Creek: Collier Reserve, corner Stud Rd and Burwood Hwy, Wantirna
Map sheet 11; Melway Ref. 63 J11

This small corner reserve has picnic and playground facilities. It seems to be well used, particularly by families and cyclists. The vegetation consists of planted non-indigenous natives, pines and scattered remnant indigenous trees. Blind Creek has not been piped here. The site has the potential to become a 'showcase' for Council's ability to handle natural water courses.

Habitat types present	Condition	Dominant & character species
1: Perennial stream		Nil
8: Wattle scrub	D	Black Wattle (<i>Acacia mearnsii</i>) - a few trees along the creek bank
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>)
10: Silver-leafed Stringybark & Swamp Gum forest	D	Silver-leafed Stringybark (<i>Eucalyptus cephalocarpa</i>), Narrow-leaf Peppermint (<i>E. radiata</i>)

Dominant or Most Potentially Damaging Weeds

Couch (*Cynodon dactylon*)
Desert Ash (*Fraxinus angustifolia*)
Kikuyu (*Pennisetum clandestinum*)
Creeping Buttercup (*Ranunculus repens*)
Wandering Jew (*Tradescantia albiflora*)

Rehabilitation Opportunities

- The creek bank is severely overrun with weeds, so there is plenty of opportunity for revegetation and possibly landscaping through the judicious use of rocks. Work should commence at the eastern boundary, with species such as Swamp Paperbark (*Melaleuca ericifolia*), Victorian Christmas Bush (*Prostanthera lasianthos*), Purple-sheath Tussock-grass (*Poa ensiformis*), Common Tussock-grass (*Poa labillardierei*) and Bidgee-widgee (*Acaena novae-zelandiae*) being used to replace weeds.
- The drainage line near the north-eastern boundary, behind 87-93 Alderford Rd, could be converted into a seasonal wetland to add to the variety of available habitat and user experience.

Opportunities for Community Education, Interpretation and Participation

- A sign to tell people that they are visiting Blind Creek, with a map to show its entire course, would be of interest to many. The interpretive notice board could also explain the type of vegetation present and its former extent within the municipality and beyond.
- The wetland, if created, could be signposted as frog habitat.

B13. Blind Creek: Burwood Hwy to rear of 6 Jonathon Ct, Wantirna South
Map sheet 11; Melway Ref. 63 J11 to 63 H12

This stretch of the waterway is wholly underground with a grassed high flow channel on top. There is almost no indigenous vegetation remaining except for some isolated plants south of Old Stud Rd and a recently burnt area of Common Reed (*Phragmites australis*) at the western end of this section (south side of creek). There has been a considerable amount of planting of both non-indigenous natives and indigenous species. The site also includes a large weedy, slashed area of land which has been used for dumping huge quantities of fill.

Habitat types present	Condition	Dominant & character species
4: Phragmites wet grassland	C	Common Reed (<i>Phragmites australis</i>)
5: Swamp scrub	D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	D	Black Wattle (<i>Acacia mearnsii</i>)
10: Silver-leafed Stringybark & Swamp Gum forest	D	Silver-leafed Stringybark (<i>Eucalyptus cephalocarpa</i>), Narrow-leaf Peppermint (<i>E. radiata</i>)

Dominant or Most Potentially Damaging Weeds

Gorse (*Ulex europaeus*)
Toowoomba Canary Grass (*Phalaris aquatica*)
Blackberry (*Rubus discolor*)

Revegetation/Rehabilitation Opportunities

- Keep slashers clear of the burnt area to allow regeneration of Common Reed and Swamp Paperbark - and any other indigenous species which may appear.
- Much of the potential of this site rests with the future plans for the large triangular area bounded by the creek to the north-west, Stud Rd to the east and privately owned land to the south. Originally, prior to filling, Swamp Gum forest, Swamp scrub and seasonal wetlands were probably the dominant features, and some wetland restoration would add enormously to the habitat value of this highly modified landscape.

Opportunities for Community Education, Interpretation and Participation

Little at this stage, but a bird survey would be very useful in determining the species present and therefore the types of habitat which need to be maintained or diversified to ensure a constant food supply. Do not discount the residents of the 'retirement village' on Old Stud Rd as a source of information, inspiration and assistance.

B14. Blind Creek: Rear of Jonathon Ct to Timmothy Dr, Wantirna South

Map sheet 11; Melway Ref. 63 G&H 12

The creek is piped underground for about half of the distance between the above points, but the grassed high flow channel branches into two at the eastern end of this section, both joining the open drainage line which originates behind 7 Condos Ct. The creek then meanders above ground right through to High Street Rd and beyond. A broad area of flood plain extends south of the creek to Jenola Pde. There are many planted beds, particularly along the northern boundary, containing indigenous and non-indigenous native species.

An intentionally skeletal management plan has been prepared for this section of waterway and the following one (Donoghue, 1996a).

Habitat types present	Condition	Dominant & character species
1: Perennial stream	D	Nil
3: Seasonal wetland	C,D	Common Reed (<i>Phragmites australis</i>), Cumbungi (<i>Typha ?orientalis</i>)
5: Swamp scrub	B,C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
6: Riparian forest	B	Manna Gum (<i>E. viminalis</i>), Narrow-leafed Peppermint (<i>E. radiata</i>)
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>)
10: Silver-leafed Stringybark & Swamp Gum forest	B,C,D	Silver-leafed Stringybark (<i>E. cephalocarpa</i>), Swamp Gum, Narrow-leafed Peppermint

Significant Sites

A narrow band of Silver-leafed Stringybark & Swamp Gum forest abutting Swamp scrub near Condos Ct contains a form of Silver-leafed Stringybark unlike any others along Blind Creek, as well as an excellent range of understorey species. This site is well deserving of more detailed study, as indicated by Donoghue (1996a).

Significant Species

Carex fascicularis (Tassel Sedge) - three plants in a seasonal wetland
Lepidosperma filiforme (Common Rapier-sedge)
Pomaderris racemosa (Cluster Pomaderris) - several plants
Thelionema caespitosum (Tufted Blue-lily)
Veronica gracilis (Slender Speedwell) - recorded by Donoghue (1996a)

Fauna Habitat

The diversity of habitat provided by this site almost ensures a reasonable diversity of fauna, although there appear to be no trees with hollows in this section.

Dominant or Most Potentially Damaging Weeds

Box Elder (*Acer negundo*)

Desert Ash (*Fraxinus angustifolia*)
 Pampas Grass (*Cortaderia seloana*)
 Brown-top Bent (*Agrostis capillaris*) - moving into high quality forest
 Bindweed (*Calystegia silvatica*) - huge quantities on banks of perennial waterway
 Fennel (*Foeniculum vulgare*)
 Cape Ivy (*Delairea odorata*)
 Blackberry (*Rubus discolor*)
 Japanese Honeysuckle (*Lonicera japonica*)
 Cape Broom (*Genista monspessulana*)
 Gorse (*Ulex europaeus*)
 Madiera Winter-cherry (*Solanum pseudocapsicum*)
 Wandering Jew (*Tradescantia albiflora*)
 various exotic grasses, including:
 Kikuyu (*Pennisetum clandestinum*)
 Toowoomba Canary Grass (*Phalaris aquatica*)
 Sweet Vernal Grass (*Anthoxanthum odoratum*)
 Water Couch (*Paspalum distichum*)

Rehabilitation Opportunities

- The major problem in this area is incremental encroachment of slashers into remnant bushland. This practice must cease, as recommended by Donoghue (1996a). *High priority.*
- The seasonal wetland containing the Tassel Sedge has been partly filled and could be carefully recreated.
- Allow the expansion of Cumbungi in the southern high flow channel by not slashing, if its expansion will not interfere with the drainage function of the overall system. (Consult with Melbourne Water).
- Blackberry and Japanese Honeysuckle control in the swamp scrub will allow natural regeneration of desirable species.
- A nest box installation and monitoring program would greatly improve the habitat values of the site and provide a vehicle for public involvement.

Other Management Issues

- Huge amounts of builders' rubbish are accumulating at the edge of the swamp scrub near Condos Ct from a new subdivision. Building Inspectors and Local Laws Officers should be asked to monitor building sites closely and ensure that builders dispose of their plastic, cement bags etc correctly.
- Rubbish dumping in general seems to be a common practice here. Fence to limit access.
- Garden refuse is being dumped in remnant vegetation behind 81-85 Old Orchard Dr. A campaign is needed through this area to inform people of the correct methods of disposal of garden refuse and warning of fines for anyone caught dumping.
- Silver-leafed Stringybarks and other trees have recently been damaged or felled near the southern boundary of site.
- This site and the next, west of Timmothy Dr, should be treated as one management unit.

Opportunities for Community Education, Interpretation and Participation

- Involve locals, including conservation groups, RAOU, BOCA scouts/guides in a nesting box installation/monitoring program.
- Have a local authority, perhaps from KES, lead some walks through the area, pointing out the various plants, birds, butterflies or anything else of interest, along with an explanation of the threat posed by weeds, and see if a Friends Group can be formed. It is likely that at least two or three locals will take an interest, and they must be given all available information and assistance while they gain confidence in their ability to make a difference.
- Offer bird/butterfly/wildflower walks at least once per year to raise awareness of the values of the site. Advertise through a letterbox drop and local papers.
- Prepare educational material suitable for all groups, from early primary school to VCE CAT level to fully utilise the educational potential of the whole area east and west of Timmothy Dr.

B15. Blind Creek: Timmothy Dr to High Street Rd, Wantirna

Map sheet 11; Melway Ref. 63 G12 to 72 E1

This section of Blind Creek is above ground and flows through a broad flood plain. A considerable amount of indigenous vegetation, although fragmented, remains, particularly on the southern side. These remnants are surrounded by slashed exotic grasses.

An intentionally skeletal management plan has been prepared for this section of waterway and the previous one (Donoghue, 1996a).

Habitat types present	Condition	Dominant & character species
1: Perennial stream	C	Blunt Pondweed (<i>Potamogeton ochreatus</i>), Cumbungi (<i>Typha ?orientalis</i>)
3: Seasonal wetland	C,D	Slender Knotweed (<i>Persicaria decipiens</i>), Water Plantain (<i>Alisma plantago-aquatica</i>), rushes (<i>Juncus</i> spp.)
4: Phragmites wet grassland	C,D	Common Reed (<i>Phragmites australis</i>)
5: Swamp scrub	B,C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
6: Riparian forest	D	Manna Gum (<i>E. viminalis</i>) - a couple of trees
7: Swamp Gum forest	B,C,D	Swamp Gum (<i>Eucalyptus ovata</i>)
10: Silver-leafed Stringybark & Swamp Gum forest	B,C,D	Silver-leafed Stringybark (<i>E. cephalocarpa</i>), Swamp Gum

Significant Site

The whole site is significant for its diversity and its potential as an educational resource (in conjunction with the previous section of waterway).

Swamp Gum forest with numerous understorey species immediately west of Timmothy Dr deserves further study but is being damaged by trampling.

Significant Species

Alternanthera denticulata (Lesser Joyweed)
Eleocharis acuta (Common Spike-rush)
Gynatrix pulchella (Hemp Bush)
Pomaderris racemosa (Cluster Pomaderris)
Triglochin procerum (Water-ribbons)

Fauna Habitat

Swamp Paperbark thickets, even very small ones isolated by mowing, are providing habitat for small birds.

There are quite a number of trees with hollows, but still not enough to provide much habitat.

Dominant or Most Potentially Damaging Weeds

Box Elder (<i>Acer negundo</i>)	Hawthorn (<i>Crataegus monogyna</i>)
Desert Ash (<i>Fraxinus angustifolia</i>)	Jerusalem Artichoke (<i>Helianthus tuberosus</i>)
Fleabane (<i>Conyza albida</i>)	Madeira Winter-cherry (<i>Solanum pseudocapsicum</i>)
Brown-top Bent (<i>Agrostis capillaris</i>)	Wandering Jew (<i>Tradescantia albiflora</i>)
Bindweed (<i>Calystegia silvatica</i>)	various exotic grasses, including:
Fennel (<i>Foeniculum vulgare</i>)	Kikuyu (<i>Pennisetum clandestinum</i>)
Cleavers (<i>Galium aparine</i>)	Toowoomba Canary Grass (<i>Phalaris aquatica</i>)
Blackberry (<i>Rubus discolor</i>)	Sweet Vernal Grass (<i>Anthoxanthum odoratum</i>)
Japanese Honeysuckle (<i>Lonicera japonica</i>)	Water Couch (<i>Paspalum distichum</i>)
Gorse (<i>Ulex europaeus</i>)	Cocksfoot (<i>Dactylis glomerata</i>)
Spanish Heath (<i>Erica lusitanica</i>)	

Rehabilitation Opportunities

- Slashing is causing considerable damage to the edges of remnant patches and in some cases, right through remnants. This site needs to be walked by suitably qualified Parks staff who can stake small trees and shrubs being mown and mark areas which should not be slashed with star pickets or fencing. *High priority.*
- Plant Sweet Bursaria (*Bursaria spinosa*), Prickly Currant-bush (*Coprosma quadrifida*), and other appropriate prickly species in groups to create thickets for wildlife prior to removal of Furze and Blackberry. *Moderate priority.*
- Judicious weed control, particularly of Water Couch, in seasonal wetlands will allow the expansion of desirable species
- Remove Box Elders and Desert Ashes from creek banks and replace with Manna Gums.
- Blackberry control in Phragmites wet grassland will allow the recovery of some potentially valuable patches. *Moderate priority.*
- Some isolated trees, notably the Manna Gum on the creek edge behind 9 Rosalie Ct and the Silver-leafed Stringybark behind Jenola Pde, should be fenced to allow seedlings to grow.

Other Management Issues

- The broken ground is difficult to negotiate in places and indicates that mowing is attempted even when the ground is very wet. If access is difficult for people, they will not use the site and will not gain full use or appreciation of it.
- The possibility of construction of additional paths should be pursued in accordance with the recommendation of Donoghue (1996a).
- It has been suggested (Scott Seymour, 8/4/97) that the drainage capacity of this site is 'near its limits', implying that further flood mitigation works may be required, particularly near High Street Rd. If such works become necessary, they should be conducted with utmost subtlety to minimise damage to the remnant vegetation and landscape values of the site.
- Large amounts of plastic, mainly bags, seem to be washed or blown into the reserve. The drainage line beside Timmothy Dr needs to be cleaned out so it does not attract rubbish dumping.
- The area seems popular with dog walkers and as a result, there are substantial amounts of dog faeces present. This situation is unpleasant and unhealthy for other reserve users.

Opportunities for Community Education, Interpretation and Participation

- A wren recovery program, involving planting habitat species and monitoring existing populations could be an interesting project for local residents, community groups or schools.
- If, as part of a trail network, a bridge could be constructed over the creek (providing it would not interfere with the drainage function of the creek), groups like the Army Reserves, Rotary or Lions might like to sponsor and construct it (Army Engineers sometimes undertake such projects). At least one bridge would be desirable to link both sides of the reserve. Currently, you can walk on the north side or on the south side, which limits access and enjoyment of the whole.

B16. Blind Creek: High Street Rd to the Wantirna South Refuse Transfer Station, including Llewellyn Reserve

Map sheet 12; Melway Ref. 72 E1 to 72 D3

Description: This section includes the public land beside the creek as well as the whole of Llewellyn Reserve. Much of the creek retains its original alignment. Its banks support substantial areas of remnant vegetation, most of which have been seriously affected by grazing and by creeping and climbing weeds. There are also extensive mown areas. Llewellyn Reserve is a reclaimed brickworks, now including playing fields constructed on clay fill. The margins of the reserve, and particularly the north-east corner, retain some native vegetation, including some significant species.

A full description of this area is given in the companion report, *Management Plan for Cathies Lane Bushland, Wantirna South*, except that it excludes the eastern half of Llewellyn Reserve.

Habitat types present	Condition	Dominant & character species
1: Perennial stream		Water-ribbons (<i>Triglochin procerum</i>), Curly Pondweed (<i>Potamogeton crispus</i>)
2: Perennial wetland		Cumbungi (<i>Typha orientalis</i>)
3: Seasonal wetland (incl. non-perennial stream)	B,C	Rushes (<i>Juncus</i> spp.), Cumbungi (<i>Typha orientalis</i>), knotweeds (<i>Persicaria</i> spp.)
5: Swamp Scrub	C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	C	Black Wattle (<i>Acacia mearnsii</i>), Blackwood (<i>A. melanoxylon</i>)
7: Swamp Gum forest	B-D	Swamp Gum (<i>Eucalyptus ovata</i>), Blackwood, Black Wattle
10: Silver-leafed Stringybark & Swamp Gum forest	B-D	Silver-leafed Stringybark (<i>Eucalyptus cephalocarpa</i>), Narrow-leafed Peppermint (<i>E. radiata</i>)

Significant Site

The natural vegetation in this section is of botanical significance at the Municipal level (i.e. within the context of the City of Knox). It contains seven regionally significant plant species and nine that are significant at the Municipal level. The presence of over eighty indigenous plant species also stands out at the Municipal level.

Significant Plant Species

Regionally significant

- Carex fascicularis* (Tassel Sedge) - several plants
- Carex gaudichaudiana* (probably Fen Sedge, but not a definite ID) - one patch, perhaps a single plant
- Lepidosperma gunnii* (Slender Sword-sedge) - many plants, mostly in Llewellyn Reserve
- Persicaria praetermissa* (Spotted Knotweed) - many plants in two seasonal wetlands
- Persicaria subsessilis* (Hairy Knotweed) - many plants in a single wetland
- Potamogeton crispus* (Curly Pondweed) - many distributed right along the creek, not all mapped
- Thelymitra holmesii* (Slender Blue Swamp Sun-orchid) - many plants

Significant at the Municipal level

- Alternanthera denticulata* (Lesser Joyweed) - four small populations found
- Eleocharis acuta* (Common Spike-rush) - one patch (perhaps one plant) in a corner of the dam
- Gynatrix pulchella* (Hemp Bush) - two solitary plants
- Hakea nodosa* (Yellow Hakea) - three plants near the western boundary
- Leptospermum lanigerum* (Woolly Tea-tree) - one plant only
- Olearia ramulosa* (Twiggy Daisy-bush) - one small patch at east of Llewellyn Reserve
- Triglochin procerum* (Water-ribbons) - many plants
- Triglochin striatum* (Streaked Arrow-grass) - a patch (perhaps one plant) in each of two seasonal wetlands
- Veronica gracilis* (Slender Speedwell) - one plant only

Fauna Habitat

Far more birds were observed in the creek corridor here than in most other parts of the study whole area. This is probably mainly because of the wildlife corridor which the creek provides to nearby Jells Park. The dam is also an attractive feature for water birds.

Several disused birds nests were observed in shrubs.

Dominant or Most Potentially Damaging Weeds

Anthoxanthum odoratum (Sweet Vernal-grass)

Calystegia silvatica (Greater Bindweed)

Dactylis glomerata (Cocksfoot)

Holcus lanatus (Yorkshire Fog)

Lonicera japonica (Japanese Honeysuckle)

Ranunculus repens (Creeping Buttercup)

Rubus discolor (Blackberry)

Tradescantia albiflora (Wandering Jew)

Ulex europaeus (Gorse or Furze)

Revegetation/Rehabilitation Opportunities

Refer to the companion report, '*A Management Plan for Cathies Lane Bushland, Wantirna South*'.

Opportunities for Community Education, Interpretation and Participation

As above.

Other Management Issues

For the eastern half of Llewellyn Reserve (which is excluded from the management plan), it is strongly recommended that the naturally regenerating area near Coppelia St should be inspected by a qualified botanist in or about early November, in the likelihood of finding rare plant species that need careful management.

7.6 Dandenong Creek

D1. Dandenong Creek: Pavitt Lane to Liverpool Rd, The Basin Map sheet 13; Melway Ref. 65 K5 to 65 H4/5

Open (above-ground) creek with patchy remnant vegetation including fine specimens of Manna Gum (*Eucalyptus viminalis*) near Liverpool Rd. The wildlife corridor is supplemented by a more continuous canopy of trees along Pavitt Lane, roughly parallel to the creek.

Habitat types present	Condition	Dominant & character species
1: Perennial stream	D	Curly Pondweed (<i>Potamogeton crispus</i>)
3: Seasonal wetland	C,D	Rushes (<i>Juncus</i> spp.), Knotweeds (<i>Persicaria</i> species)
5: Swamp scrub	C	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
6: Riparian forest	C	Manna Gum (<i>E. viminalis</i>)
7: Swamp Gum forest	C	Swamp Gum (<i>Eucalyptus ovata</i>)

Significant Trees

Many large, mature Manna Gums occur along the creek for approximately 100 metres east of Liverpool Rd. Some have hollows suitable for nesting and roosting.

Significant Plant Species

Regionally significant

- Amyema quandang* (Grey Mistletoe)
- Calystegia marginata* (Forest Bindweed) - several plants
- Cynoglossum* (= *Austrocynoglossum*) *latifolium* (Forest Hound's-tongue) - several plants
- Persicaria subsessilis* (Hairy Knotweed) - several plants

Significant at the Municipal level

- Alternanthera denticulata* (Lesser Joyweed) - a few plants
- Gynatrix pulchella* (Hemp Bush) - five plants next to Liverpool Rd
- Pomaderris aspera* (Hazel Pomaderris) - three plants
- Prostanthera lasianthos* (Victorian Christmas Bush) - two plants

Dominant or Most Potentially Damaging Weeds

- Square-stem St. John's Wort (*Hypericum tetrapterum*)
- various exotic grasses including:
 - Toowoomba Canary-grass (*Phalaris aquatica*)
 - Kikuyu (*Pennisetum clandestinum*)
 - Cocksfoot (*Dactylis glomerata*)
- Cherry-plum (*Prunus cerasifera*)

Basket Willow (*Salix × rubens*)
 Sweet Pittosporum (*Pittosporum undulatum*)
 Blackberry (*Rubus discolor*)

Revegetation Opportunities

Plantings of Manna Gum, Swamp Gum and Blackwood are required to fill gaps in the creek corridor. *Moderate priority.*

Other Management Issues

- horse and cattle access to creek; broken fence on north bank needs repairing or replacing with electric fence to prevent stock access.
- erosion and resultant tree falls
- dieback of trees and tree-ferns

Opportunities for Community Education, Interpretation and Participation

This section is nearly all within private land. The owner's interest in sound management practices may be fostered by making available information on environmental weeds, indigenous flora and fauna, habitat management and useful contact organisations like Land for Wildlife, Landcare and the Knox Environment Society.

D2. Liverpool Road Retarding Basin, The Basin

Map sheet 13; Melway Ref. 65 G4

This section includes a retarding basin with two lakes, seasonal wetlands and most other habitat types detected in the study area. It is the largest and most diverse area of intact indigenous vegetation in the study area and has the greatest number of significant plant species. There are many planted non-indigenous native species as well, some of which are potential environmental weeds.

Habitat types present	Condition	Dominant & character species
1: Perennial stream		
2: Perennial wetland	B,C,D	Cumbungi (<i>Typha orientalis</i>), Marsh Club-rush (<i>Bolboschoenus medianus</i>), Common Reed (<i>Phragmites australis</i>)
3: Seasonal wetland	A,B,C	Cumbungi, Marsh Club-rush, rushes (<i>Juncus</i> spp.), Pale Knotweed (<i>Persicaria lapathifolia</i>)
5: Swamp scrub	A,B,C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	C,D	Blackwood (<i>Acacia melanoxylon</i>)
7: Swamp Gum forest	B,C,D	Swamp Gum (<i>Eucalyptus ovata</i>)

Habitat types present	Condition	Dominant & character species
11: Messmate & Silver-leafed Stringybark forest	C,D	Silver-leafed Stringybark (<i>Eucalyptus cephalocarpa</i>), with Messmate Stringybark (<i>E. obliqua</i>) and Narrow-leaf Peppermint (<i>E. radiata</i>)
12: Bundy - Messmate - Peppermint forest	B,C	Messmate Stringybark, Bundy (<i>E. goniocalyx</i>), Narrow-leaf Peppermint
14: Messmate damp forest	A,B	Messmate Stringybark, abundant ferns

Significant Sites

This is probably the most significant part of the study area, with important wetlands and the largest intact piece of indigenous vegetation. The patch of Swamp scrub is undoubtedly one of the richest and most ecologically healthy in the Melbourne region. Such valuable examples are almost entirely confined in the region to the sand belt, where different plant species are present.

Significant Species

Plants - regionally significant

Amyema quandang (Grey Mistletoe)
Austrofestuca hookeriana (Hooker Fescue) - three small groups
Baumea ?rubiginosa (Soft Twig-rush)
Baumea tetragona (Square Twig-rush)
Blechnum minus (Soft Water-fern)
Bolboschoenus medianus (Marsh Club-rush)
Calystegia marginata (Forest Bindweed)
Goodenia elongata (Lanky Goodenia)
Potamogeton crispus (Curly Pondweed) - good population in the creek

Plants - significant at the Municipal level

Alternanthera denticulata (Lesser Joyweed) - many in seasonal wetlands
Gahnia sieberiana (Red-fruit Saw-sedge) - about ten scattered plants
Histiopteris incisa (Bat's Wing Fern)
Hypolepis ?rugosula (a ground-fern, species uncertain)
Polystichum proliferum (Mother Shield-fern)
Pomaderris aspera (Hazel Pomaderris) - scattered along creek
Prostanthera lasianthos (Victorian Christmas Bush) - scattered along creek
Triglochin striatum (Streaked Arrow-grass)

Animals

Black-fronted Dotterel
Dusky Woodswallow
Scarlet Robin
Blue-tongue lizard and many small skinks

Significant Fauna Habitat

The site possesses high habitat values for its wetland and forest fauna due to good vegetation condition and connection to the Dandenong Ranges National Park via Dandenong Creek in the previous section (Pavitt Lane to Liverpool Rd).

Dominant or Most Potentially Damaging Weeds

Square-stem St. John's Wort (*Hypericum tetrapterum*)
 Blackberry (*Rubus discolor*)
 Crack Willow (*Salix fragilis*)
 Pussy Willow (*Salix × reichardtii*)
 Montpellier Broom (*Genista monspessulana*)
 Cleavers (*Galium aparine*)
 exotic grasses

Rehabilitation Opportunities

- Blackberry control is acutely needed. *High priority.*
- Swamp scrub should be incrementally expanded on its eastern and northern edges by relieving slashing. *Moderate priority.*
- Remove willows fringing permanent and seasonal wetlands. *Low to moderate priority.*

Other Management Issues

Discussion with Melbourne Water is required to enable appropriate flora and fauna conservation priorities to be set.

A management plan should be prepared to guide future management of the significant flora and fauna.

Opportunities for Community Education, Interpretation and Participation

The high-quality intact vegetation in the southern part of this reserve has some existing tracks through it and could be sensitively developed as an excellent nature walk loop.

D3. Dandenong Creek: Below Liverpool Road Retarding Basin to end of Chandlers Lane, Boronia

Map sheet 13; Melway Ref. 65 F&G 4

Non-perennial, artificial creek with fringing Swamp Gum forest and Swamp scrub.

Habitat types present	Condition	Dominant & character species
2: Perennial wetland (a small pond)	C or D	Common Duckweed (<i>Lemna disperma</i>)
3: Seasonal wetland on non-perennial creek bed	C,D	Cumbungi (<i>Typha orientalis</i>), rushes (<i>Juncus</i> spp.), Pale Knotweed (<i>Persicaria lapathifolia</i>)
5: Swamp scrub	C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
7: Swamp Gum forest	C,D	Swamp Gum (<i>Eucalyptus ovata</i>)

Significant Species

Plants

- Blechnum cartilagineum* (Gristle Fern)
- Carex ?gaudichaudiana* (Fen Sedge) - unconfirmed due to lack of reproductive material
- Exocarpos strictus* (Pale-fruit Ballart)
- Gynatrix pulchella* (Hemp Bush)
- Lemna disperma* (Common Duckweed) - in small pond near western end of section
- Polystichum proliferum* (Mother Shield-fern)
- Pomaderris aspera* (Hazel Pomaderris)
- Prostanthera lasianthos* (Victorian Christmas Bush)

Animals

- Flame Robin
- Crested Shrike-tit

Dominant or Most Potentially Damaging Weeds

- Blackberry (*Rubus discolor*)
- Sweet Pittosporum (*Pittosporum undulatum*)
- exotic grasses including:
 - Brown-top Bent (*Agrostis capillaris*)
 - Couch (*Cynodon dactylon*)
 - Panic Veldt-grass (*Ehrharta erecta*)
 - Yorkshire Fog (*Holcus lanatus*)
 - Kikuyu (*Pennisetum clandestinum*)

Recreational Opportunity

A path would be desirable beside the north-flowing section coming out of Liverpool Road Retarding Basin, but this would be through farmland that may be privately owned.

D4. Dandenong Creek: End of Chandlers Lane, The Basin, to Allambanan Dr access reserve, Bayswater

Map sheets 13&14; Melway Ref. 65 F4 to 65 B1

This section includes fragmented remnant vegetation along the seasonal creek course and a mown sports field (Beresford Dr Reserve) that includes indigenous revegetation plots and some seasonal wetlands. The stretch of creek from 32 Toolimerin Av to the end of this section (and further west) is underground with mown grass on top.

Habitat types present	Condition	Dominant & character species
3: Seasonal wetland including non-perennial creek bed	B,C,D	abundant rushes (<i>Juncus</i> spp.)
4: Phragmites wet grassland	C	Common Reed (<i>Phragmites australis</i>)
5: Swamp scrub	C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)

Habitat types present	Condition	Dominant & character species
8: Wattle scrub	C	Blackwood (<i>Acacia melanoxylon</i>)
7: Swamp Gum forest	D, C & almost B	Swamp Gum (<i>Eucalyptus ovata</i>)

Significant Site

The small seasonal wetland south of oval at Beresford Dr is significant for the presence of a substantial population of Clustered Rush (*Juncus vaginatus*) - the first positive record of the species for the eastern suburbs (although David Albrecht (an expert on rushes) is believed to have seen it at Koomba Park, Wantirna South, in the late 1980s).

Significant Plant Species

Amyema quandang (Grey Mistletoe)
Calystegia marginata (Forest Bindweed)
Eleocharis sphacelata (Tall Spike-rush)
Exocarpos strictus (Pale-fruit Ballart)
Gynatrix pulchella (Hemp Bush)
Juncus vaginatus (Clustered Rush)
Pomaderris aspera (Hazel Pomaderris)
Prostanthera lasianthos (Victorian Christmas Bush)
Typha domingensis (Cumbungi)

Fauna Habitat

Scrubby vegetation along creek provides nesting sites for Common Ringtail Possums.

Dominant or Most Potentially Damaging Weeds

Water Couch (*Paspalum distichum*)
 other exotic grasses including:

- Panic Veldt-grass (*Ehrharta erecta*)
- Toowoomba Canary Grass (*Phalaris aquatica*)
- Cocksfoot (*Dactylis glomerata*)

willows (*Salix* × *reichardtii*, *S. fragilis*, *S. babylonica*)
 Hawthorn (*Crataegus monogyna*)
 Cherry-plum (*Prunus cerasifera*)
 Blackberry (*Rubus discolor*)

Revegetation Opportunities

- The small wetland just north of oval on Beresford Dr has great potential for restoration if Water Couch is sprayed, but this requires **great care to avoid harming the Clustered Rush plants**. Seed should be first collected from the rushes for safety. *High priority.*
- Planting of Swamp Gums on northern creek bank from end of Chandler Lane to Memory Ct to improve corridor continuity. *High priority.*
- Planting of Swamp Gums and Blackwoods to improve corridor continuity (especially in the most fragmented sections, east of Colchester Rd and east of Allambanan Drive access reserve). *Moderate to high priority in different sections.*

Other Management Issues

Indigenous fauna is generally depleted due to habitat fragmentation.

A path (preferably on the north side of the creek) would be desirable to link Chandler Lane with the Memory Ct area.

Opportunities for Community Education, Interpretation and Participation

'Bush Link' group(s) involving local residents to assist with revegetation and weed control.

D5. Dandenong Creek: Allambanan Drive access reserve to Bayswater Rd, Bayswater

Map sheets 14&15; Melway Ref. 65 B1 to 64 G2

This section includes fragmented remnant vegetation beside the (now non-perennial) creek channel in the eastern half, and planted vegetation in the western half. The creek's flow is now usually underground except during storm events, when water flows along the broad, slashed floodway.

Habitat types present	Condition	Dominant & character species
3: Seasonal wetland including non-perennial creek bed	C,D	Rushes (<i>Juncus</i> spp.), Slender Knotweed (<i>Pericaria decipiens</i>), Water Plantain (<i>Alisma plantago-aquatica</i>), Tall Sedge (<i>Carex appressa</i>)
4: Phragmites wet grassland	C	Common Reed (<i>Phragmites australis</i>)
5: Swamp scrub	C	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	C,D	Blackwood (<i>Acacia melanoxylon</i>)
7: Swamp Gum forest	C,D	Swamp Gum (<i>Eucalyptus ovata</i>)
10: Silver-leafed Stringybark & Swamp Gum forest	C,D	Silver-leafed Stringybark (<i>Eucalyptus cephalocarpa</i>)

Significant Species

Plants

Carex ?gaudichaudiana (Fen Sedge)

Danthonia duttoniana (Brown-back Wallaby-grass) - the only known eastern suburban site

Gynatrix pulchella (Hemp Bush)

Leptospermum lanigerum (Woolly Tea-tree)

Animals

Dusky Wood-swallow

Golden-headed Cisticola

Dominant or Most Potentially Damaging Weeds

- willows (*Salix* × *reichardtii*, *S. fragilis*)
- Japanese Honeysuckle (*Lonicera japonica*)
- Cherry-plum (*Prunus cerasifera*)
- Blackberry (*Rubus discolor*)
- Desert Ash (*Fraxinus angustifolia*)
- Sycamore Maple (*Acer pseudoplatinus*)
- Angled Onion (*Allium triquetrum*)
- various exotic grasses including:
 - Brown-top Bent (*Agrostis capillaris*)
 - Prairie Grass (*Bromus catharticus*)
 - Couch (*Cynodon dactylon*)
 - Panic Veldt-grass (*Ehrharta erecta*)
 - Yorkshire Fog (*Holcus lanatus*)
 - Paspalum (*Paspalum dilatatum*)

Revegetation Opportunities

The long stretch from the bend where the creek turns south down to Bayswater Rd requires plantings of Manna Gum, Swamp Gum, Blackwood etc. to provide greater corridor continuity. *Low to moderate priority.*

Other Management Issues

Plantings along the creek for 400 m east of Bayswater Rd include indigenous species of non-indigenous provenance. These should be removed once indigenous stock have grown large enough to replace them.

Foxes are particularly abundant here.

Opportunities for Community Education, Interpretation and Participation

Depending on the details of the proposed development of the De Felice land facing Dorset Rd north of the creek, there may be an excellent opportunity for an interpretation stop at the disused horse pond. It is one of the most significant wetlands in metropolitan Melbourne.

D6. Dandenong Creek: Bayswater Park to the railway bridge

Map sheet 15; Melway Ref. 64 G2 to 64 E2

This section includes the creek as far west as the railway bridge. It is underground in the east and a straight, open, concrete-lined drain in the west. Also included are playing fields, mown grass, picnic facilities and patches of remnant vegetation to the south as far as Mountain Highway.

Habitat types present	Condition	Dominant & character species
1: Perennial stream	D	Knotweeds (<i>Persicaria</i> spp.)

Habitat types present	Condition	Dominant & character species
3: Seasonal wetland	D	Common Spike-rush (<i>Eleocharis acuta</i>), Centella (<i>Centella cordifolia</i>), Water Plantain (<i>Alisma plantago-aquatica</i>), Slender Knotweed (<i>Persicaria decipiens</i>)
5: Swamp scrub	C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	D	Blackwood (<i>Acacia melanoxylon</i>), Black Wattle (<i>A. mearnsii</i>)
6: Riparian forest	C,D	Swamp Gum (<i>Eucalyptus ovata</i>), Messmate Stringybark (<i>E. obliqua</i>), Narrow-leafed Peppermint (<i>E. radiata</i>), Manna Gum (<i>E. viminalis</i>)
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>)

Fauna Habitat

Some mature eucalypts have hollows suitable for nesting or roosting of fauna.

Dominant or Most Potentially Damaging Weeds

Cape Broom (*Genista monspessulana*) - eastern end
 Blackberry (*Rubus discolor*)
 Sallow Wattle (*Acacia longifolia*)
 Drain Flat-sedge (*Cyperus eragrostis*)
 Ivy (*Hedera helix*)
 Wandering Jew (*Tradescantia albiflora*)
 Monterey Pine (*Pinus radiata*)
 Willow-leaf Hakea (*Hakea salicifolia*) - planted

Rehabilitation Opportunities

- Exclusions of mowing could be tried in parts of the C-condition riparian forest where indigenous grasses - Weeping Grass (*Microlaena stipoides*), Wallaby-grasses (*Danthonia* spp.) - are persisting to determine whether indigenous understorey regeneration is possible.
- Slashers should be prevented from encroaching into islands of indigenous vegetation.

Other Management Issues

- Cape Broom at eastern end should be removed.
- Lack of understorey is favouring hardy, large birds; small species are scarce.

D7. Dandenong Creek: Railway bridge to opposite tennis courts at H. E. Parker Reserve, Bayswater

Map sheet 16; Melway Ref. 64 E2 to 64 C2

This section includes the mostly narrow and very fragmented strip of riparian vegetation along the creek. The creek is entirely underground with mown grass on top. Most of the spaces between remnant and planted shrubs and trees are also mown or slashed. The forest is severely reduced in plant species.

Habitat type present	Condition	Dominant & character species
6: Riparian forest	D	Manna Gum (<i>Eucalyptus viminalis</i>), Swamp Gum (<i>E. ovata</i>), Blackwood (<i>Acacia melanoxylon</i>), Black Wattle (<i>A. mearnsii</i>).

Significant Tree

There is one suspected Yarra Gum (*Eucalyptus yarraensis*) opposite the northern end of Derwent Dr. This species is officially listed as rare nationally.

Dominant or Most Potentially Damaging Weeds

- willows (*Salix ?babylonica*)
- Desert Ash (*Fraxinus angustifolia*)
- Pampas Grass (*Cortaderia selloana*)
- Cotoneaster (*Cotoneaster glaucophyllus*)
- Sallow Wattle (*Acacia longifolia*)
- Bracelet Honey-myrtle (*Melaleuca armillaris*)
- Spotted Gum (*Eucalyptus maculata*)
- various exotic grasses including:
 - Paspalum (*Paspalum dilatatum*)
 - Kikuyu (*Pennisetum clandestinum*)
 - Toowoomba Canary Grass (*Phalaris aquatica*)

Revegetation/Rehabilitation Opportunities

- Space around at least some remnant eucalypts could be fenced off to exclude mowing and allow seed regeneration.
- An area of mown grass on top of the barrel drain just east of its confluence with Bungalook Creek has regenerating Common Reed. This could be allowed to grow and spread by excluding slashing. A site inspection by the Environmental Planning Section of Melbourne Water (phone Scott Seymour, 9235 2123) would be required to assess the effect of this on the drainage function of the floodway.
- Some of the indigenous plantings are extremely dense and need thinning.

Opportunities for Community Education, Interpretation and Participation

If eucalypts are fenced off to allow seedlings to grow and if Common Reed is allowed to spread, both management techniques should be promoted by signs, if vandalism can be avoided.

D8. Dandenong Creek: From opposite tennis courts at H. E. Parker Reserve, Heathmont, to Wantirna Rd, Wantirna
Map sheets 16&17; Melway Ref. 64 C2 to 63 G3

This section includes a patchy riparian strip of varying width, a few larger patches of shrubs and trees, some small seasonal wetlands and one small permanent wetland.

Habitat types present	Condition	Dominant & character species
1: Perennial stream	C,D	Pondweeds (<i>Potamogeton ochreatus</i> and <i>P. crispus</i>) are the only true aquatics. Knotweeds (<i>Persicaria</i> spp.), Water Plantain (<i>Alisma plantago-aquatica</i>) and Cumbungi (<i>Typha ?orientalis</i>) occur on the damp edges.
2: Perennial wetland	B, perhaps A	Tiny Duckweed (<i>Wolffia australiana</i>), Water-ribbons (<i>Triglochin procerum</i>)
3: Seasonal wetland	B,C,D	Sedges (<i>Carex</i> spp.), Knotweeds (<i>Persicaria</i> spp.), rushes (<i>Juncus</i> spp.), Water Plantain (<i>Alisma plantago-aquatica</i>), Common Reed (<i>Phragmites australis</i>), Cumbungi (<i>Typha ?orientalis</i>), Lesser Joyweed (<i>Alternanthera denticulata</i>)
5: Swamp scrub	B,C,D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	C,D	Wattles (<i>Acacia</i> spp.)
6: Riparian forest	B,C,D	Manna Gum (<i>Eucalyptus viminalis</i>), Swamp Gum (<i>E. ovata</i>), Yellow Box (<i>E. melliodora</i>), Messmate Stringybark (<i>E. obliqua</i>), Narrow-leafed Peppermint (<i>E. radiata</i>)
7: Swamp Gum forest	C	Swamp Gum, Swamp Paperbark

Significant Site

Manson Reserve (western section): high quality wetland surrounded by a good buffer of riparian forest, swamp scrub and wattle scrub.

Elsewhere in this section there are a number of wetland and forest patches with good existing vegetation and habitat values and great potential for improvement and extension.

Significant Species

Plants

Alternanthera denticulata (Lesser Joyweed) - well distributed in seasonal wetlands

Amyema quandang (Grey Mistletoe)

Carex fascicularis (Tassel Sedge) - common at Manson Reserve (west), scattered elsewhere.

Carex gaudichaudiana (Fen Sedge) - common in one seasonal wetland.

Gahnia sieberiana (Red-fruit Saw-sedge) - one plant
Gynatrix pulchella (Hemp Bush)
Lycopus australis (Austral (Australian) Gypsywort) - two plants
Muellerina eucalyptoides (Creeping Mistletoe)
Pericaria subsessilis (Hairy Knotweed) - Two small patches at Manson Reserve
Pomaderris racemosa (Cluster Pomaderris) - ?one remnant, ? two planted
Potamogeton crispus (Curly Pondweed)
Prostanthera lasianthos (Victorian Christmas Bush)
Triglochin procera (Water-ribbons)
Triglochin striatum (Streaked Arrow-grass)
Wolffia australiana (Tiny Duckweed) - abundant in January in the permanent wetland.

Animals

Olive-backed Oriole
 Black-shouldered Kite
 Royal Spoonbill
 Little Lorikeet
 Sacred Kingfisher
 Flame Robin
 Brown Goshawk
 Spotted Marsh Frog
 Pobblebonk or Southern Bullfrog

Fauna Habitat

- Fairly continuous habitat corridor
- Dead trees and living trees with hollows
- Larger patches of remnant vegetation with reasonable structure provide habitat for small native birds.
- Abundant Grey Mistletoe (*Amyema quandang*) provide habitat for Mistletoebirds as well as Imperial White and Wood White Butterflies.

Dominant or most Potentially Damaging Weeds

willows (including *Salix × reichardtii*, *S. ?alba*)
 Desert Ash (*Fraxinus angustifolia*)
 Dense Waterweed (*Egeria densa*)
 Boneseed (*Chrysanthemoides monolifera*)
 Blackberry (*Rubus discolor*)
 Creeping Buttercup (*Ranunculus repens*)
 Bulbil Watsonia (*Watsonia meriana*)
 Water Couch (*Paspalum distichum*)
 various other exotic grasses

Rehabilitation Opportunities

The wetlands require targeted, labour intensive weed control to enable on-site regeneration of indigenous species similar to the methods used at Manson Reserve (west). *Moderate to high priority.*

Isolated eucalypts could be protected from mowing by simple fencing and signs to enable seed regeneration. *Moderate priority.*

Mark seasonal wetland indicated on plan with fencing or planting of larger indigenous species on edges to prevent slashing on a trial basis. *High priority.*

Careful species choice is required for sites within the floodway. Consult with Environmental Planning Section, Melbourne Water (Scott Semour 9235 2123).

Opportunities for Community Education, Interpretation and Participation

Involve local residents in 'Wetland Watch', 'Creek Watch' and 'Bush Link' groups and projects.

Use signs to promote frog habitat in seasonal ponds and other wetlands.

D9. Dandenong Creek: Wantirna Rd to Boronia Rd, Wantirna Map sheet 18; Melway Ref. 63 G3 to 63 D4

This section of creek is above-ground but straightened, with cleared, mown banks in most places. Tree and shrub cover is patchy, with many non-indigenous natives planted and a scattering of remnant trees and shrubs surrounded by mown grass and weeds. There are a number of seasonal wetlands, most of them located near Boronia Rd at Winton Wetlands.

There is a management plan for Winton Wetlands (McCaffrey, 1992?), to which the reader is referred for more detail.

Habitat types present	Condition	Dominant & character species
1: Perennial stream	C,D	Pondweeds (<i>Potamogeton ochreatus</i> and <i>P. crispus</i>) are the only true aquatics. Knotweeds (<i>Persicaria</i> spp.), Common Reed (<i>Phragmites australis</i>) and Water Plantain (<i>Alisma plantago-aquatica</i>) occur on the damp edges.
2: Perennial wetland	B	Tall Spike-rush (<i>Eleocharis sphacelata</i>), Water-ribbons (<i>Triglochin procerum</i>)
3: Seasonal wetland	B,C	Knotweeds, rushes (<i>Juncus</i> spp.), Lesser Joyweed (<i>Alternanthera denticulata</i>), Water Plantain
4: Phragmites wet grassland	C,D	Common Reed (<i>Phragmites australis</i>)
5: Swamp scrub	D	Swamp Paperbark (<i>Melaleuca ericifolia</i>)
8: Wattle scrub	D	Wattles (<i>Acacia</i> spp.)
6: Riparian forest	C,D	Manna Gum (<i>Eucalyptus viminalis</i>) with other eucalypts in smaller numbers. Also Black Wattle (<i>Acacia mearnsii</i>) and Blackwood (<i>A. melanoxylon</i>)
7: Swamp Gum forest	D	Swamp Gum (<i>Eucalyptus ovata</i>)

Significant Site

Winton Wetlands represent regionally significant seasonal and perennial wetlands surrounded by depleted riparian forest.

Significant Trees

There are at least two Aboriginal canoe trees in this section. The exact location cannot be disclosed, so any activity which may adversely affect a tree in this area needs to be checked prior to ensure no damage is done to the canoe trees.

Significant Species

Plants:

Alternanthera denticulata (Lesser Joyweed)
Azolla pinnata (Ferny Azolla)
Centipeda minima (Spreading Sneezeweed)
Eleocharis sphacelata (Tall Spike-rush)
Gratiola pubescens (Glandular Brooklime)
Myriophyllum simulans/variifolium (Water-milfoil) - possibly planted at Winton Wetlands
Persicaria praetermissa (Spotted Knotweed)
Potamogeton crispus (Curly Pondweed)
Ranunculus ?inundatus (a buttercup of uncertain identity) - at Winton Wetlands.
Spiranthes sinensis (Ladies' Tresses)
Spirodela punctata (Thin Duckweed)
T. striatum (Streaked Arrow-grass)
Triglochin procerum (Water-ribbons)

Animals:

Latham's Snipe, a migratory bird protected under the Japan Australia Migratory Bird Agreement;
 Yellow-billed Spoonbill

Significant Fauna Habitat

- Some excellent habitat for water birds and frogs at Winton Wetlands.
- Some remnant eucalypts have hollows.

Dominant or Most Potentially Damaging Weeds

willows (*Salix* spp., including *S. × rubens*)
 Desert Ash (*Fraxinus angustifolia*)
 Dense Waterweed (*Egeria densa*)
 Parrot's Feather (*Myriophyllum aquaticum*)
 Gorse (*Ulex europaeus*)
 Blackberry (*Rubus discolor*)
 Creeping Buttercup (*Ranunculus repens*)
 Drain Flat-sedge (*Cyperus eragrostis*)
 various exotic grasses including:
 Water Couch (*Paspalum distichum*)
 Paspalum (*P. dilatatum*)
 Couch (*Cynodon dactylon*)

Rehabilitation Opportunities

- The approximately 1.5 hectare site west of Magnolia St has wonderful potential for a wetlands rehabilitation and construction project similar to Winton Wetlands. It has a good population of remnant eucalypts, including some fine Manna Gums. In the north-east corner of this site there is a small wetland that should be fenced off from slashing, signposted and allowed to regenerate and spread with the help of careful weeding by trained operators. *High priority.*
- The weedy horse paddocks between the previous site and Winton Wetlands should be considered for a future wetland construction project, taking into account their close proximity to transmission lines and a freeway reservation. *Low priority.*
- The two areas discussed above could ultimately be used to link (as much as possible) with the Scoresby Freeway Billabongs (Site 82 of Lorimer *et al.* 1997) on the other side of the creek.
- A few small patches of Common Reed near the creek could be allowed to spread if excluded from mowing. Effects on the floodway would have to be considered (phone Scott Seymour 9235 2123).
- At least one possibly indigenous planting of eucalypts and wattles is extremely dense, spindly and unnatural looking, and should be thinned.
- Established plantings of non-indigenous natives including Spotted Gum (*Eucalyptus maculata*), River Red Gum (*E. camaldulensis*), Bog Gum (*E. kitsoniana*), Prickly Paperbark (*Melaleuca styphelioides*) and Wirilda (*Acacia retinodes*) should be progressively removed (Section 6.3).

Other Management Issues

Horse grazing is damaging one section.

Opportunities for Community Education, Interpretation and Participation

- Involve local residents in 'Wetland Watch' and 'Creek Watch' projects.
- Signpost the wetland remnant west of Magnolia St.
- Winton Wetlands is already used by schools as an educational resource (McCaffrey, 1992?)

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