

# Heritage (Decision about Registration of Kama Woodland/Grassland, Belconnen) Notice 2012

Notifiable Instrument NI2012—541

made under the

*Heritage Act 2004* section 42 Notice of decision about Registration

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**1. Revocation**

This instrument replaces NI 2012—280.

**2. Name of instrument**

This instrument is the *Heritage (Decision about Registration of Kama Woodland/Grassland, Belconnen) Notice 2012*.

**3. Registration details of the place**

Registration details of the place are at Attachment A: Register entry for Kama Woodland/Grassland, Belconnen.

**4. Reason for decision**

The ACT Heritage Council has decided that Kama Woodland/Grassland, Belconnen meets one or more of the heritage significance criteria at s 10 of the *Heritage Act 2004*. The register entry is at Attachment A.

**5. Date of Registration**

18 October 2012

**Jennifer O'Connell**

**A/g Secretary** (as delegate for)  
**ACT Heritage Council**

**18 October 2012**



ACT Heritage Council

**AUSTRALIAN CAPITAL TERRITORY**

**HERITAGE REGISTER  
(Registration Details)**

For the purposes of s. 41 of the *Heritage Act 2004*, an entry to the heritage register has been prepared by the ACT Heritage Council for the following place:

Kama Woodland/Grassland, Belconnen

Blocks 1419, 1386, and parts of 1596 and 181 and verge of William Hovell Drive adjacent to blocks 1419, 1386 and 1596, Belconnen District.

**DATE OF REGISTRATION**

18 October 2012

Notifiable Instrument: 2012—541

Copies of the Register Entry are available for inspection at the ACT Heritage Unit. For further information please contact:

The Secretary  
ACT Heritage Council  
GPO Box 158, Canberra, ACT 2601

Telephone: 13 22 81 Facsimile: (02) 6207 2229

## IDENTIFICATION OF THE PLACE

### Kama Woodland/Grassland, Belconnen

Blocks 1419, 1386, and parts of 1596 and 181 and verge of William Hovell Drive adjacent to blocks 1419, 1386 and 1596, Belconnen District.

The Place is located in the central Molonglo River valley, between William Hovell Drive and the lower Molonglo River (see Map 1).

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## STATEMENT OF HERITAGE SIGNIFICANCE

The Kama Woodland/Grassland, Belconnen is significant because it includes examples of two endangered ecological communities (Yellow Box-Red Gum Grassy Woodland and Natural Temperate Grassland) together with the natural boundary (ecotone) between them. The landscape relationship between the two vegetation communities is important because it is considered to be similar to the vegetation patterns that existed prior to European settlement.

This place is also significant because there is a high diversity of native species in the Kama Woodland/Grassland including uncommon native forbs, woodland birds and riparian species. The Kama Woodland/Grassland provides important ecological connectivity between the lower Molonglo River and The Pinnacle (south Belconnen Hills).

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## FEATURES INTRINSIC TO THE HERITAGE SIGNIFICANCE OF THE PLACE

The physical features of the Kama Woodland/Grassland that particularly reflect its heritage significance are:

- An area of Yellow Box-Red Gum Grassy Woodland (an endangered ecological community) that is described as partially modified and retains good species diversity and habitat complexity, including the number of mature age and old growth trees that provide a high density of hollows and other habitat suitable for hollow-dependent animals (such as bats, parrots and treecreepers);
  - An area of Natural Temperate Grassland (an endangered ecological community);
  - The natural boundary (an ecotone) between two endangered ecological communities (Yellow Box-Red Gum Grassy Woodland and Natural Temperate Grassland) that is now rarely found in the ACT and demonstrates the landscape location of the zone of cold air drainage that is often associated with the boundary;
  - Habitat for many native plant and animal species including several threatened species: the Brown Treecreeper, Varied Sittella, White-winged Triller and Pink-tailed Worm Lizard;
  - A zone of ecological connectivity between the lower Molonglo River and The Pinnacle (south Belconnen Hills) with a high level of ecological integrity of the area's natural values within a landscape that is mostly highly altered.
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## APPLICABLE HERITAGE GUIDELINES

Heritage Guidelines adopted under s25 of the *Heritage Act 2004* are applicable to the conservation of the Kama Woodland/Grassland.

The guiding conservation objective is that the Kama Woodland/grassland, shall be conserved and appropriately managed in a manner respecting its heritage significance and the features intrinsic to that heritage significance, and consistent with a sympathetic and viable use or uses. Any works that have a potential impact on significant fabric (and / or other heritage values) shall be guided by a professionally documented assessment and conservation policy relevant to that area or component (i.e. a Statement of Heritage Effects – SHE).

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## REASON FOR PROVISIONAL REGISTRATION

Kama Woodland/Grassland has been assessed against the heritage significance criteria and been found to have heritage significance when assessed against two criteria under the *Heritage Act 2004* including (k) and (l).

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## ASSESSMENT AGAINST THE HERITAGE SIGNIFICANCE CRITERIA

Pursuant to s.10 of the *Heritage Act 2004*, a place or object has heritage significance if it satisfies one or more of the following criteria. Significance has been determined by research as accessed in the references below. Future research may alter the findings of this assessment.

- (a) it demonstrates a high degree of technical or creative achievement ( or both), by showing qualities of innovation, discovery, invention or an exceptionally fine level of application of existing techniques or approaches.**

The Kama Woodland/Grassland, Belconnen does not meet this criterion.

- (b) it exhibits outstanding design or aesthetic qualities valued by the community or a cultural group.**

The Kama Woodland/Grassland, Belconnen does not meet this criterion.

- (c) it is important as evidence of a distinctive way of life, taste, tradition, religion, land use, custom, process, design or function that is no longer practiced, in danger of being lost or is of exceptional interest.**

The Kama Woodland/Grassland, Belconnen does not meet this criterion.

- (d) it is highly valued by the community of a cultural group for reasons of strong or special religious, spiritual cultural, educational or social associations.**

The Kama Woodland/Grassland, Belconnen does not meet this criterion.

- (e) it is significant to the ACT because of its importance as part of local Aboriginal tradition.**

The Kama Grassland/Woodland, Belconnen does not meet this criterion.

- (f) it is a rare or unique example of its kind or is rare or unique in its comparative intactness**

The Kama Woodland/Grassland, Belconnen does not meet this criterion.

- (g) it is a notable example of a kind of place or object and demonstrates the main characteristics of that kind**

The Kama Woodland/Grassland, Belconnen does not meet this criterion.

- (h) it has strong or special associations with a person, group, event, development or cultural phase in local or national history**

The Kama Woodland/Grassland, Belconnen does not meet this criterion.

- (i) it is significant in understanding the evolution of natural landscapes, including significant geological features, landforms, biota or natural processes**

The Kama Woodland/Grassland, Belconnen does not meet this criterion.

- (j) it has provided, or is likely to provide, information that will contribute significantly to a wider understanding of the natural or cultural history of the ACT because of its use or potential use as a research site or object, teaching site or object, type locality or benchmark site.**

The Kama Woodland/Grassland, Belconnen does not meet this criterion.

- (k) for a place- it exhibits unusual richness, diversity or significant transitions of flora, fauna or natural landscapes and their elements.**

Kama Woodland/Grassland, Belconnen includes good examples of the ACT's two endangered ecological communities (Yellow Box-Red Gum Grassy Woodland and Natural Temperate Grassland). At Kama they have been assessed as being mostly only partially modified from their natural condition. Importantly, the significant transition at the boundary between these two communities (the ecotone) is largely intact (now unusual in the ACT and surrounding region) and demonstrates the zone of cold air-drainage characteristic of the woodland/grassland transition.

- (l) for a place – it is a significant ecological community, habitat or locality for any of the following:**

- (i) the life cycle of a native species;**

Kama Woodland/Grassland provides ecological connectivity between the lower Molonglo River and The Pinnacle (Belconnen Hills). The Woodland/Grassland is an endangered ecological community (under the *Environment Protection Biodiversity Conservation Act 1999*) and for the associated fauna found within the area.

- (ii) rare, threatened or uncommon species;**

The woodland provides habitat for three of ACT's threatened birds – the Brown Treecreeper, Varied Sittella and White-Winged Triller, and some of regionally declining woodland birds - the Southern Whiteface, Restless Flycatcher, Woodswallow, Flame Robin and Speckled Warbler - have also been recorded at Kama. In the grassland habitat along the riparian zone the threatened Pink-tailed Worm Lizard is recorded.

- (iii) species at the limits of their natural range;**

- (iv) distinct occurrences of species**

## SUMMARY OF THE PLACE HISTORY AND PHYSICAL DESCRIPTION

### HISTORY

'Kama Woodland/Grassland' is located on a relatively moist site on a south to southwest facing slope, with deep and fertile soils. It predominantly comprises Yellow Box-Red Gum Grassy Woodland (an endangered ecological community) and includes a range of large, old mature eucalypts, healthy eucalypt regeneration and mixed aged saplings. At its lower end the woodland intergrades into Natural Temperate Grassland endangered ecological community adjacent to the Molonglo River. There is also a section of Scribbly Gum Dry Forest on the upper slope of the site. Scribbly Gum, Red Stringybark, Broad-leaved Peppermint and Apple Box also occur on the site. The mid-layer is generally patchy, dominated by eucalypt saplings, *Bursaria*, and the weed species Sweet Briar and African Boxthorn.

A mixture of native and introduced pasture grasses, native forbs and herbs, and weeds dominate the ground layer. Common species include the native grasses Tall Spear Grass, Corkscrew Grass, Wallaby Grasses, Red Grass, Weeping Grass and Kangaroo Grass; the introduced grasses *Phalaris*, Wild Oat, Brome Grass and Barley Grass. A number of less common native ground layer plants are present in the nominated area. These include:

- **Sweet Hound's Tongue, *Cynoglossum suaveolens***, an uncommon though widespread plant within the region, is often found in disturbed sites.
- **Nodding Chocolate Lily, *Dichopogon fimbriatus***, uncommon though widespread throughout the southeast region. It has chocolate-scented flowers that are highly aromatic.
- **Australian Anchor Plant, *Discaria pubescens***, a rare plant in the region, is a spiny shrub often found in rocky sites. It is apparently palatable to stock.
- **Blue Heron's-bill, *Erodium cicutarium***, an uncommon annual that has clusters of blue flowers in late spring and summer.
- **Vanilla Lily, *Arthropodium milleflorum***, an uncommon plant in the region, has distinctive vanilla-scented white, pale mauve or pink flowers from November to February.
- **Smooth Flax Lily, *Dianella longifolia***, a tall tufted plant with blue berries, is uncommon in the region and found mainly in grassland and grassy woodland fringes.

Further information on most of these species can be found in Eddy, D. *et al.* (2001).

Although they have lower ecological value, the more open paddock areas on either side of the treed parts of block (Block 1419 – District of Belconnen) are included in the place. These areas are important in protecting and enhancing the natural heritage values and integrity of the Kama Woodland/Grassland and are also comprised of significant woodlands/grasslands

The site shows evidence of past activities such as some pasture improvement, clearance of the shrub layer to paddock trees and some heavy grazing.

The Kama Nature Reserve is a recent addition to the Canberra Nature Park.

Apart from a small section of Scribbly Gum Dry Forest, the Kama Reserve is classified as either Yellow Box-Red Gum Grassy Woodland or Natural Temperate Grassland, both of which are listed as endangered ecological communities under the Nature Conservation Act 1980. The area of Scribbly Gum Dry Forest is included in the nomination as it is an important part of the woodland/grassland habitat area. The large area of Yellow Box-Red Gum Grassy Woodland in the Kama Reserve displays particularly diverse habitat values. See the following table for a detailed description of each polygon (see Map 2).

The Kama Woodland/Grassland area is largely made up of the endangered ecological community Yellow Box-Red Gum Grassy Woodland. Most of this is classified as partially modified, the category for the highest quality lowland woodland. These are considered to be relatively intact remnants of the pre-European ecological community with high habitat diversity and cover of native species.

This woodland intergrades with an area of high quality Natural Temperate Grassland endangered ecological community (also classified as partially modified). There is a high diversity of native species in this area including uncommon native forbs (non-woody plants that are not a grass sedge or rush). This grassland area has high conservation value and may support animals that are considered uncommon in the ACT, such as the Blind Snake.

The area between the south western Kama Reserve boundary (Block 1419 District of Belconnen) and the Molonglo River is a habitat area for the Pink-tailed Worm Lizard (*Aprasia parapulchella*). This species is listed as threatened nationally and occurs in some grassland areas on hill slopes in the ACT (including this site).

A key feature of the woodland is the number of mature age and old growth trees that provide a high density of hollows and suitable habitat for hollow-dependent animals (such as bats, parrots and treecreepers). This is reflected in a good range and diversity of bird species which utilise hollows for nesting; including a small population of the threatened Brown Treecreeper, as well as the Eastern Rosella, the Red-rumped Parrot and the Tree Martin, a seasonal breeding migrant. Profuse flowering of these old trees provides an abundant food source for nectar and insect-feeding birds and other tree-dwelling animals.

While full fauna surveys of the area have not yet been carried out, many native animals other than birds are likely to exist at this site. The woodland and grassland areas are likely to support reptiles, possums, bats and other native animals that use the following as habitat: hollows in trees; standing dead timber; old logs; rocks; and native plants. Rocky areas with associated tussock grass provide good habitat especially for reptiles. The area is also likely to support a number of frogs due to the ephemeral creeks, permanent dams and fringing vegetation. Two different frog species were casually observed during Wildlife Research and Monitoring plant survey in 2004-2005.

The registered area of Kama Woodland/Grassland provides ecological connectivity between the Molonglo River to The Pinnacle, Mt Painter and Black Mountain nature reserves, and a key link to the Molonglo River as well as to the rural lands and woodlands to the west. This is thought to be important to enable bird species to move up and down from the river into that woodland and grassland complex. Long-term survival of species such as the Restless Flycatcher and Brown Treecreeper is reliant on maintaining this connectivity.

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## NON-STATUTORY BACKGROUND INFORMATION

In a broad context including the Molonglo Valley as a whole, the Kama Woodland/Grassland and surrounding area is part of an important habitat mosaic for a diverse range of birds of prey that occur in the Molonglo Valley. These include the Little Eagle - which is known to be declining locally, the Peregrine Falcon and the Wedge-tailed Eagle as well as nine other raptor species.

The surrounding landscape of Kama Woodland/Grassland is mostly highly altered rural land, although it is bordered to the south by the Molonglo River Corridor Nature Reserve. Urban development is situated to the northeast of Kama Woodland/Grassland and other rural leasehold lands are located adjacent to the other boundaries of the property. The site contains woodland and natural grassland of high to very high value.

Canberra Ornithologists Group (COG) have undertaken bird surveys at Kama, since the 1980s. Over 50 different bird species have been recorded at the site and three of these are threatened species in the ACT. COG has been surveying the woodland area at Kama since 2004 as part of their regular and ongoing bird monitoring program. This project monitors 14 locations and 135 sites in grassy woodlands around the ACT. COG surveys have indicated that the threatened Brown Treecreepers surveyed at the site are a resident population. These have been known to the area since at least the mid 1980s. A COG member is undertaking a study of the threatened Brown Treecreeper population at the site, to determine information such as their number, territories used and movements.

A post-graduate student at the Australian National University (Fenner School of Environment and Society) commenced ecological studies in late 2008.

There are very few Brown Treecreepers in woodlands near urban fringes, and this is possibly the only population near the western fringes of the urban area of Belconnen. Two other threatened birds have been recorded there, the Varied Sittella and White-Winged Triller. Two bird species on the ACT “watching brief” have also been recorded; the Dusky Woodswallow and Flame Robin. In addition, a number of other birds that are known to be declining regionally have also been recorded. These include the Southern Whiteface, Restless Flycatcher and Speckled Warbler.

Map 2 provides an overview of vegetation communities within the registered area. A detailed description of each area linked to Map 2 is provided in Table 1 below. For each area, the vegetation community present, vegetation condition and its habitat values are described. Vegetation condition is derived by determining the degree of modification to vegetation types within the ACT. See Map 3 for ecological communities/habitat classifications.

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## REFERENCES

Summary of Plant Community Survey for ‘Kama’ (Spring/Summer 2004-2005), Wildlife Research and Monitoring Unit – Environment ACT, unpublished

ACT Government *Plant Community Survey of Kama*  
Spring/Summer 2004 - 2005, (Wildlife Research and Monitoring, Environment ACT, Canberra)

ACT Government 2004 Woodlands for Wildlife; ACT Lowland Woodland Conservation Strategy. Action Plan No. 27 (Environment ACT, Canberra).

ACT Government 2004 ACT Lowland Native Grassland Conservation Strategy. Action Plan No. 28 (Environment ACT, Canberra).

ACT Government 2005 *Ribbons of Life: Draft ACT Aquatic Species and Riparian Zone Conservation Strategy*. Action Plan No. 29 (Arts, Heritage and Environment, Canberra).

Eddy, D. et al. *Grassland Flora, a field guide for the Southern Tablelands (NSW & ACT)* (2001), NCP Canberra.



## MAPS AND IMAGES

### Appendix A - Images



Common Bearded Dragon that was observed basking on a standing dead tree during 'Kama' site assessment visit (Jan 2006).



Natural Temperate Grassland endangered ecological community at Kama – extending down to the Molonglo River.



Yellow Box-Red Gum Woodland endangered ecological community at Kama, with standing fallen timber providing fauna habitat.



Yellow Box-Red Gum Woodland endangered ecological community at Kama, with strong eucalypt regeneration.



Yellow Box-Red Gum Woodland endangered ecological community at Kama in Spring.  
Photo by Jenny Bounds.

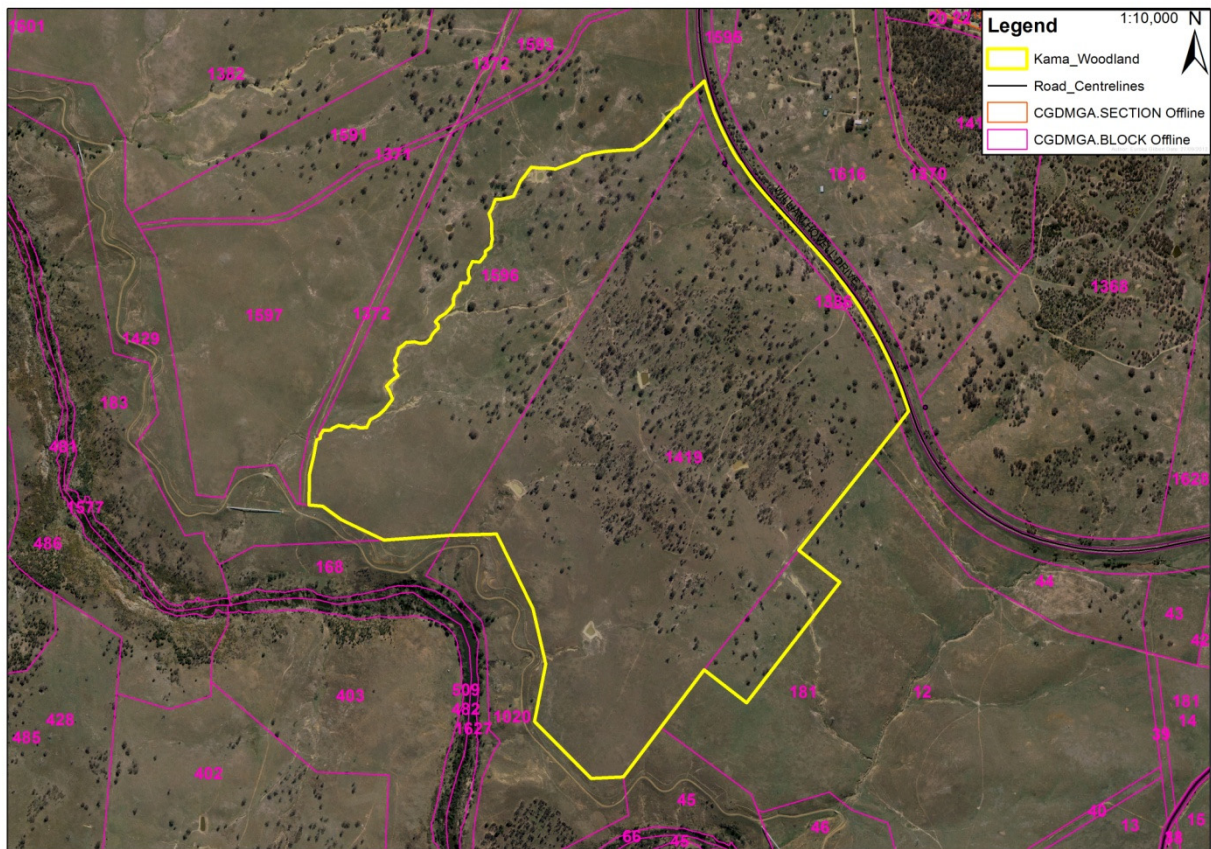
**Table 1: Description of Vegetation polygons**

| Area Description  | Vegetation Community   | Habitat Values   | Vegetation Condition                         |
|---|--|--|--|
| <b>Polygon WK 5</b><br>Woodland dominated by Blakely's Red Gum and Yellow Box, with some Apple Box on a southeasterly to southwesterly hill-slope. The mid layer is comprised of Blakely's Red Gum saplings and seedlings and Bursaria. The ground layer is dominated by Kangaroo Grass, Wallaby Grasses and spear grasses. There is a high diversity of native forbs present, including uncommon species. Pest plants of concern include a serious infestation of St John's Wort.  | Yellow Box-Red Gum Grassy Woodland Endangered Ecological Community | Very diverse habitat present:<br>Old growth trees<br>Presence of tree hollows<br>Dead standing trees<br>Mistletoes<br>Regenerating tree and shrub thickets<br>Some rock outcropping<br>Stock dams<br>Vulnerable Brown Tree creepers present; excellent bird habitat. | Partially Modified Lowland Woodland          |
| <b>Polygon WK 5B</b><br>Southerly footslope with isolated Red Stringybark and Broad-leaved Peppermint. The groundlayer is dominated by Kangaroo Grass, Wallaby grasses, Common Everlasting, Blue Devil, and Spear Grasses. There is a high diversity of native species, including uncommon native forbs. Common exotics include Rat's Tail Fescue, St John's Wort, and Wild Oats. Other pest plants present in small numbers include Saffron and Spear Thistles, Paterson's Curse and Sweet Briar.                                      | Natural Temperate Grassland Endangered Ecological Community        | Some rock outcropping<br>Native grasses<br>Stock dam   | Partially Modified Lowland Natural Grassland |
| <b>Polygon WK 7</b><br>Open woodland dominated by Blakely's Red Gum and Yellow Box with some Red Stringybark on footslopes with a northerly and westerly aspect. Isolated taller trees are present. The patchy mid layer is comprised of Blakely's Red Gum saplings and seedlings and Sweet Briar. The highly diverse ground layer is dominated by Spear grasses, Wallaby grasses and introduced annual weeds, particularly Brome Grass, Barley Grass, and Rat's Tail Fescue. Pest plants of concern include St John's Wort and Briers. | Yellow Box-Red Gum Grassy Woodland Endangered Ecological Community | Old growth trees<br>Presence of tree hollows<br>Dead standing trees<br>Regenerating tree thickets<br>Some fallen timber<br>Shrub thickets<br>Some rock outcropping<br>Drainage line and stock dams.  | Partially Modified Lowland Woodland          |
| <b>Polygon WK8</b><br>Open woodland dominated by Blakely's Red Gum, with some Scribbly Gum and  | Yellow Box-Red Gum Grassy Woodland Endangered                      | Old growth trees<br>Presence of tree hollows<br>Some rock  | Moderately Modified Lowland Woodland         |

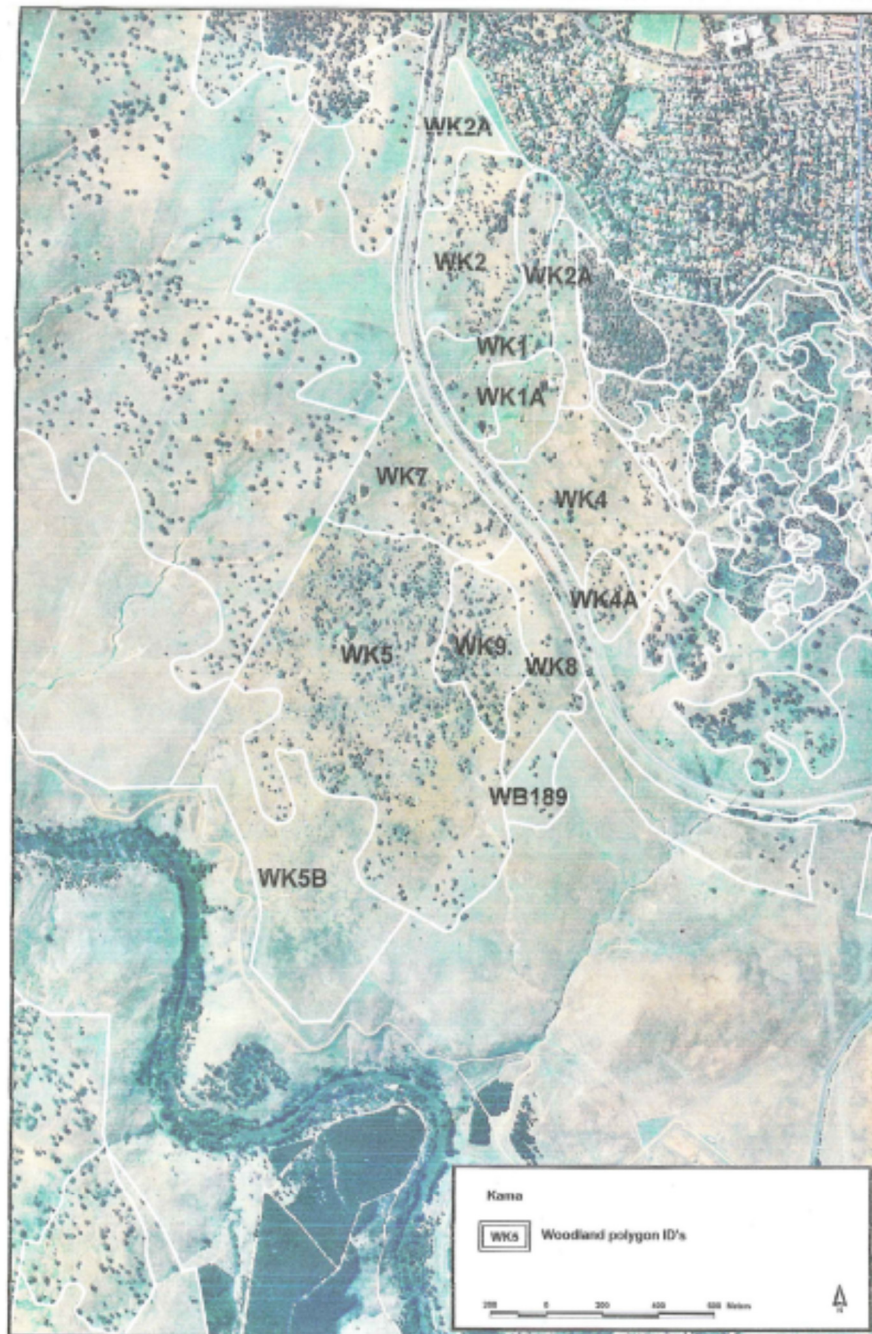
|  |                         |  |                            |
|--|-------------------------|--|----------------------------|
| Broad-leaved Peppermint on a hill-slope and hilltop with a northeasterly aspect. The mid layer is comprised of Blakely's Red Gum and Scribbly Gum saplings and seedlings. The ground layer is dominated by Spear Grasses and Kangaroo Grass, and introduced annual weeds including Brome Grass, and Barley Grass. A high diversity of common native forbs and herbs is present. Pest plants of concern include St John's Wort.   | Ecological Community    | outcropping and loose rocks  |                            |
| <b>Polygon WK9</b><br>Forest dominated by Scribbly Gum, with some Blakely's Red Gum and Broad-leaved Peppermint on a hill slope with a westerly aspect. The patchy mid layer is comprised of Blakely's Red Gum, Scribbly Gum and Broad-leaved Peppermint saplings and small amounts of Sweet Bursaria, Sweet Briar and Blackberry are present. The ground layer is dominated by Spear Grasses, Wallaby Grasses, Red Grass and introduced annual pasture and weed species. Pest plants of concern include Paterson's Curse, St Johns Wort and Blackberry. | Scribbly Gum Dry Forest | Old growth trees<br>Presence of tree hollows<br>Dead standing trees<br>Eucalypt sapling and native and exotic shrub thickets<br>Fallen timber common<br>Some outcropping and loose rocks<br>Tussock grass common | Moderately Modified Forest |



### Map 3. Kama Woodland/Grassland Boundary



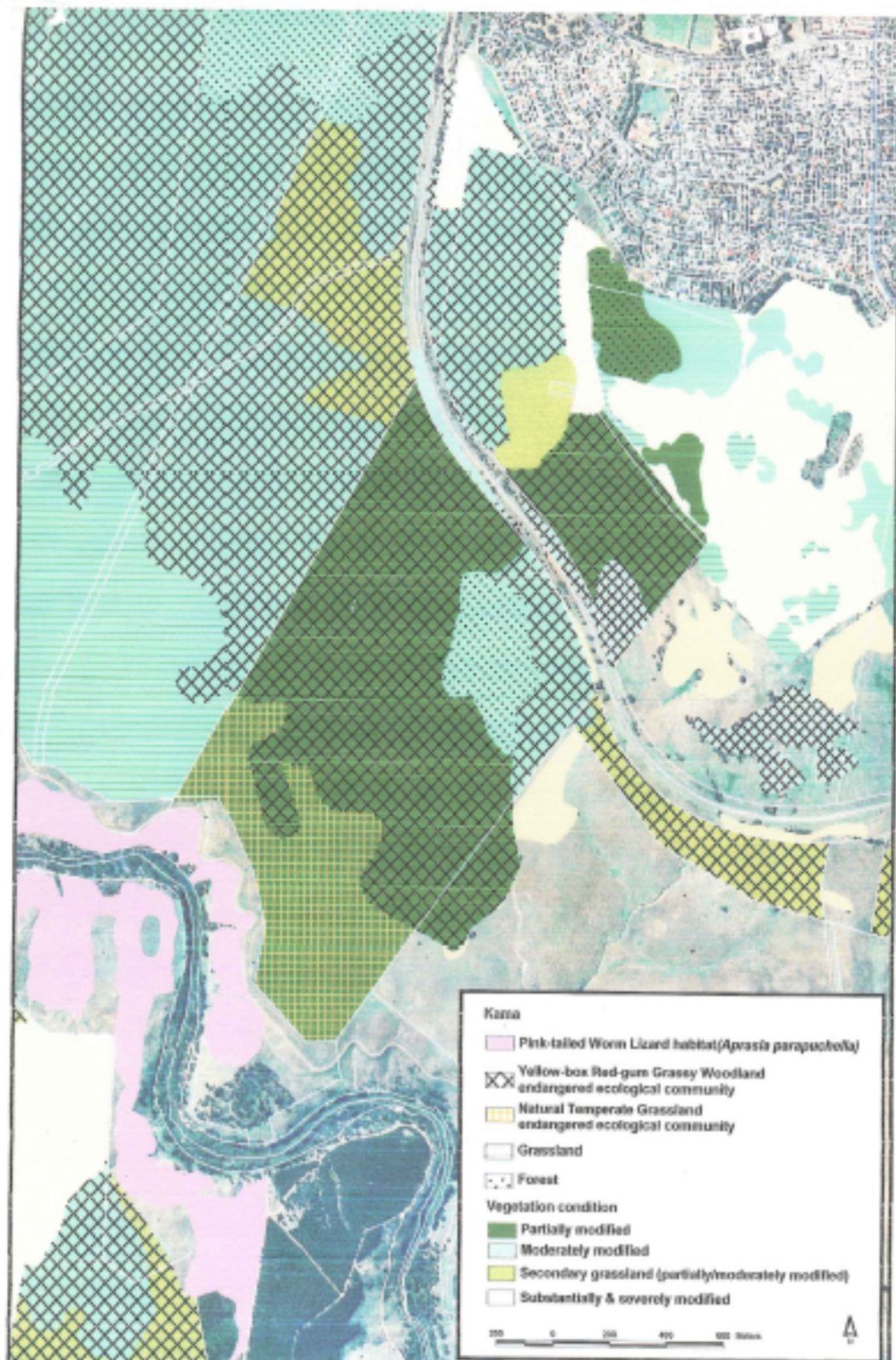
## Map 2. Vegetation polygons



Map 2. Vegetation Polygons



### Map 3. Kama Ecological Communities/ Habitat Classification



Map 3. Kama Ecological Communities/Habitat Classification