PART 18

# BIODIVERSITY

## INTRODUCTION

The urban forest, formal reserves and natural resources of Ku-ring-gai are fundamental elements of its character and support biodiversity of national, state, regional and local significance.

Greenweb (as shown on the Greenweb map - Part 18R.1) is Ku-ring-gai's Biodiversity mapping for the management of significant vegetation and habitat, biodiversity corridors and waterways throughout the LGA. The mapping facilitates a consistent and strategic approach to biodiversity management.

This includes lands mapped as 'areas of biodiversity significance' within the KLEP (Local Centres) 2012 (Clause 6.3 Biodiversity Protection), broken down into four categories:

i) Core Biodiversity Lands;

ii) Support for Core Biodiversity Lands;

iii) Landscape Remnant;

iv) Biodiversity Corridors and Buffer Areas.

In addition to these, an additional category - 'Canopy Remnant' is also included within the DCP for the role these Canopy Remnant play in supporting ecological processes and other values.

> **Note:** Further explanation and the methodology for identifying Greenweb categories is provided within Part 18.8 of this DCP and the Ku-ring-gai Biodiversity and Riparian Lands Study Version 5.

Lands excluded from Greenweb may still contain or provide habitat for threatened ecological communities, species or populations as listed under the NSW Threatened Species Conservation Act 1995, the NSW Fisheries Management Act 1994, and / or the Environment Protection and Biodiversity Conservation Act 1999. Absence of areas from the Greenweb does not remove the need for consideration and protection under these Acts.

The majority of areas within the Greenweb include native vegetation canopy. However some areas containing cleared, built or exotic vegetation have been included (See Part 18.8 Explanation of Greenweb Categories and Sub Categories). The inclusion of such areas facilitates the improvement of connectivity between core habitats and may provide additional functions such as protection of water quality. These measures will help to maintain and restore the health, diversity and connectivity of biodiversity within Ku-ring-gai and improve resilience under climate change.

Within Greenweb the potential for presence of a native soil seed bank is important. This is the natural storage of seeds that remains largely dormant until triggered by disturbance. Many plants can survive for decades as seeds stored in soil. Areas which may look visibly weedy or disturbed may contain a native seed bank and potential for restoration through fire, weed removal or other disturbance mechanisms.

> **Note:** "The soil seedbank is the key to regeneration" (*Department of Environment and Climate Change NSW 2008, Protecting and Restoring Blue Gum High Forest)*

## INTRODUCTION

The Greenweb maps should not be used at a scale finer than 1:2,000. There are considerable benefits to natural resource planning at this scale, however investigations at a site scale for individual proposals may identify inaccuracies or on ground changes.

Variations to Greenweb mapping as proposed by either Council or the proponent will be considered on merit, based on the methodology outlined in the Ku-ring-gai Biodiversity and Riparian Lands Study Version 5.

The objectives and controls in this Part applies to development activities or works that will have an impact on areas identified as Greenweb, mapped in this DCP. Within these areas, this Part guides the development activities or works in meeting the aims and objectives of the KLEP (Local Centres) 2012 (Clause 6.3 Biodiversity Protection).

Where there are inconsistencies between this Part and Section C Part 1.1 (Landscaping) of this DCP, this Part prevails to the extent of any inconsistency.

This Part is set out as follows:

i) Part 18.1 includes general objectives and controls that apply to all development on Greenweb lands;

ii) Parts 18.2 – 18.6 provide objectives and controls for each of the five categories of Greenweb based on the main functions and objectives of each area;

iii) Part 18.7 provides for no net loss of biodiversity and outlines mechanisms to achieve this;

iv) Part 18.8 provides the explanation of Greenweb categories.

# 18.1 ALL GREENWEB CATEGORIES

## Objectives

1 *To preserve the natural environment of Ku-ring-gai in the social, economic and environmental interest of the community.*

2 *To retain, consolidate and improve existing bushland, significant vegetation and habitat for flora and fauna.*

3 *To support the protection and recovery of critical habitat, regionally significant and threatened ecological communities, species and populations.*

4 *To capture carbon, contributing to climate control.*

5 *To allow for adaptation of native flora, fauna and ecological communities to climate change.*

## Controls

1 Development must be designed and sited to minimise impact on any distinctive environmental features and to conserve the areas of vegetation and/or habitat of the highest ecological value on and adjacent to the site, and to minimise fragmentation and edge effects.

The development design should also integrate consideration of bushfire, ecological impacts and management and include:

i) consideration of buildings, access, stormwater and utilities;

ii) choosing parts of the site to develop where features are not present;

iii) modifying the size, layout or construction methods to minimise on and off site disturbance and impacts;

iv) locating built structures to reduce fragmentation of open space areas and vegetation (including canopy);

v) locating buildings to take advantage of environmental features;

vi) implementing a soil and water management plan to limit impact;

vii) avoiding importing soil from outside the site;

viii) selecting native plant species that are present on site, preferably seeded from species on the site;

ix) selecting plant species that enhance local fauna habitat.

**Note:** Habitat and distinctive environmental features may include:

- cliffs and rock outcrops;
- remnant bushland and trees;
- tree hollows; and
- natural watercourses.

**Note:** Council may require, as a condition of consent, that a restriction on use be placed over key areas of the site. Council may require suitable replacements for trees or vegetation removed.

2 Subdivision must not be permitted unless each proposed site contains a building envelope that allows compliance with this Part.

3 Trees adjacent to threatened ecological communities are to be retained as a buffer. This does not apply to trees listed in Council's "Weed Management Policy".

4 The development must retain existing site drainage patterns and minimise excavation and fill within 3m of Greenweb lands.

5 Where the slope over the building footprint area is greater than 12.5%, site responsive methods such as stepping the building down the site, split level construction or pier and beam construction must be used.

6 The planting of species listed in Council's Weed Management Policy will not be permitted.

7 Species used for planting in or directly adjacent to Greenweb areas should be of local provenance.

## 18.1 ALL GREENWEB CATEGORIES (continued)

### Controls

8 A flora and fauna assessment will be required where development within Greenweb lands impacts on connectivity, existing indigenous vegetation, fauna or habitat.

**Note:** This may be waived where an assessment has already been undertaken as part of a submitted Biobanking Statement (in accordance with Part 7A of the NSW Threatened Species Conservation Act 1995).

**Note:** Flora and fauna assessments must be undertaken by an appropriately qualified and experienced person. Council assessment provisions are available on Council's website: www.kmc.nsw.gov.au.

Survey and assessments should be undertaken in accordance with guidelines from the NSW Office of Environment and Heritage.

# 18.2 CATEGORY - CORE BIODIVERSITY LANDS

## Objectives

1 *To protect and regenerate core vegetation and fauna habitat.*

2 *To maintain and enhance ecological function and connectivity.*

3 *To support the protection and recovery of Key Vegetation Communities, threatened species, populations and their habitats.*

Figure 18.2-1: Examples of Core Biodiversity Lands

## Controls

Core Biodiversity lands are areas containing a range of natural landforms, plant and animal species, habitats and ecosystems.

These areas include public lands managed for conservation, areas of regional biodiversity importance, and form the key foundation of the Greenweb (see Figure 18.2-1).

It is recognised that works may be required within this category for bushfire, land management and appropriate recreation. This may include trails, access roads, car parks and picnic areas.

| Category | Sub Category |
|---|---|
| Core Biodiversity Lands | Office of Environment and Heritage protected areas |
| | Ku-ring-gai Natural Areas |
| | Regional Fauna Habitat |

Figure 18.2-1 Areas identified as Core Biodiversity Lands

**Note:** See Part 18.8 for explanation of Greenweb categories.

1 Avoid locating development on land identified as Core Biodiversity Lands on the Greenweb map. (Refer to maps in 18R.1 of this Part)

2 Where work impacts on land within Core Biodiversity Lands, stabilisation and or rehabilitation with indigenous vegetation will be required to mitigate impacts.

3 Where the site includes land identified as Core Biodiversity Lands, works must be consistent with a management document (e.g. a Plan of Management under the Local Government Act 1993, a Vegetation Management Plan or equivalent).

4 Where no such plan exists, development and implementation of such a plan may be required. The plan must be prepared by a suitably qualified person and must identify ongoing initiatives to preserve, protect and promote the environmental values of the land.

**Note:** Guidelines for Vegetation Management Plans are available on Council's website: www.kmc.nsw.gov.au

5 Planting within land identified as Core Biodiversity Lands is to consist of:

i) locally native species;

ii) species that reflect the relevant vegetation communities within the area; and

iii) a mix of groundcover shrubs and trees, and is to exclude monocultures.

# 18.3 CATEGORY - SUPPORT FOR CORE BIODIVERSITY LANDS

## Objectives

1 *To support core areas of vegetation and fauna habitat.*

2 *To contribute to the protection and recovery of Key Vegetation Communities, threatened species, populations and their habitats.*

3 *To contribute to the protection, restoration and management of Biodiversity Corridors.*

4 *To contribute to the protection, restoration and management of vegetation and habitat in riparian lands.*

5 *To contribute to the net improvement of ecological function.*

## Controls

Land identified as Support for Core Biodiversity Lands provide a range of support values, including increased remnant size, reduced edge effects and connectivity between Core Biodiversity Lands (see Figure 18.3-1).

They also include patches of Local Fauna Habitat and/or of Key Vegetation Communities and support the health of waterways. This category includes vegetation where protection, restoration, rehabilitation or regeneration works are required to enhance overall biodiversity values.

Biodiversity Corridors have been located in positions of strategic importance, providing linkages between natural habitat areas such as formal reserves or remnant patches. Whilst these corridors typically contain barriers, including buildings, roads and infrastructure or discontinuous vegetation, they are important stepping stones or refuge sites for movement and dispersal of mobile species between more extensive habitat areas.

**Note:** Biodiversity Corridor area lacking vegetation are addressed in Category Biodiversity Corridor and Buffer Areas (Part 18.5).

Biodiversity Corridors play a vital role in improving the viability of otherwise isolated areas.

Linking core areas through an urbanised landscape by means of corridors:

- assists fauna movement by improving vegetation cover, decreasing predation risk and promoting food resources within a species foraging range;
- supports pollination, seed and gene dispersal, which may assist in the protection of high biodiversity values including endangered ecological communities and threatened flora and fauna.

| Category | Sub Category |
|---|---|
| Support for Core Biodiversity Lands | Key Vegetation Communities (KVC), adjoining Core Biodiversity Lands |
| | Local Fauna Habitat |
| | Vegetation within Core Riparian Zones and KVC's adjoining |
| | All vegetation within Biodiversity Corridors |

**Figure 18.3-1 Areas identified as Support for Core Biodiversity Lands**

**Note:** See Part 18.8 for explanation of Greenweb categories.

1 Avoid locating development on areas identified as Support for Core Biodiversity Lands on the Greenweb map. (Refer to maps in 18R.1 of this Part).

2 Where work impacts on land within Support for Core Biodiversity Lands, stabilisation and or rehabilitation with indigenous vegetation will be required to mitigate impacts.

## 18.3 CATEGORY - SUPPORT FOR CORE BIODIVERSITY LANDS (continued)

### Controls

3 Vegetation retention and rehabilitation must be designed to enhance and link existing vegetation and habitat within the site and within adjacent sites, Biodiversity Corridors and riparian lands.

4 Where land within an allotment is identified as Support for Core Biodiversity Lands, works must be consistent with a management plan (e.g. vegetation management plan). Where no plan exists, Council may require preparation of a plan. This plan must be prepared by a suitably qualified person and must identify ongoing initiatives to preserve, protect and promote the environmental values of the land.

**Note:** Guidelines for Vegetation Management Plans are available on Council's website: www.kmc.nsw.gov.au

5 Planting within land identified as Support for Core Biodiversity Lands is to consist of:

i) 100% locally native tree and understorey species within Core Riparian Zones;

ii) not less than 70% locally native tree species and 30% locally native understorey species for all other areas;

iii) species that reflect the relevant vegetation communities within the area; and

iv) a mix of groundcover shrubs and trees and is to exclude monocultures.

**Figure 18.3-1: Examples of Support for Core Biodiversity Lands**

# 18.4 CATEGORY - LANDSCAPE REMNANT

## Objectives

1 *To maintain smaller Key Vegetation Communities remnants as 'stepping stones', providing habitat, seedbank and pollination resources (facilitating gene flow) and supporting flora and fauna resilience.*

2 *To maintain and restore smaller remnants of Key Vegetation Communities across a range of topographies.*

3 *To protect trees within Key Vegetation Communities that provide food, shelter or nesting resources for native fauna, or that are of exceptional aesthetic value.*

Figure 18.4-1: Examples of Landscape Remnants

## Controls

Landscape Remnant comprises areas that are more fragmented than Support for Core Biodiversity Lands, which nevertheless contain Key Vegetation Communities and support core areas (see Figure 18.4-1). These areas act as stepping stones or habitat islands to facilitate the movement of flora, fauna and genetic resources through the urban landscape and across a range of topographies. They also provide important community and aesthetic values.

| Category | Sub Category |
|---|---|
| Landscape Remnant | Larger Key Vegetation Community (KVC) patches or KVC in good to moderate condition |
| | Significant trees within Key Vegetation Communities |

Figure 18.4-1 Areas identified as Landscape Remnant

**Note:** See Part 18.8 for explanation of Greenweb categories.

1 Avoid locating development on land identified as - Landscape Remnant; on the Greenweb map. (Refer to maps in 18R.1 of this Part).

2 Vegetation retention and rehabilitation on sites that include land identified as Landscape Remnant must be designed to improve connectivity with existing vegetation and habitat.

3 Planting within land identified as Landscape Remnant on the Greenweb map is to consist of:

i) not less than 50% locally native species;

ii) species that reflect the relevant vegetation communities within the area; and

iii) a mix of groundcover, shrubs and trees, and is to exclude monocultures.

4 Where the site contains high species diversity or is dominated by weeds within any stratum, preparation of a Vegetation Management Plan by a suitably qualified person may be required. This plan must identify ongoing initiatives to preserve, protect and promote the environmental values of the land.

**Note:** Weeds are listed in Council's Weed Management Policy, with updated noxious weed information available from the NSW Department of Primary Industries: www.dpi.nsw.gov.au

**Note:** Guidelines for Vegetation Management Plans are available on Council's website: www.kmc.nsw.gov.au

# 18.5 CATEGORY - BIODIVERSITY CORRIDORS AND BUFFER AREAS

## Objectives

1 *To manage areas providing a buffer to Core and Support for Core Biodiversity Lands.*

2 *To reduce edge effects and to improve the health, connectivity and function of local ecosystems.*

3 *To revegetate and restore Biodiversity Corridors, significant vegetation and habitat across the landscape.*

**Figure 18.5-1: Examples of Biodiversity Corridors and Buffer Areas**

## Controls

Land identified as Biodiversity Corridors and Buffer areas (as outlined within Figure 18.5-1) includes both vegetation, cleared, disturbed or built areas.

Consideration of these lands provides an opportunity:

- to undertake revegetation, rehabilitation or regeneration works, to re-connect remnants with Greenweb, improving Biodiversity Corridors;
- increase remnant size and buffering edge effects.

This is an important aim as larger more consolidated remnants are more resilient than fragmented or linear remnants.

| Category | Sub Category |
|---|---|
| Biodiversity Corridors and Buffer Areas | Buffer Areas for Core Biodiversity Lands & Support for Core Biodiversity Lands |
| | Biodiversity Corridor areas lacking vegetation |

**Figure 18.5-1 Areas identified as Biodiversity Corridors and Buffer Areas**

**Note:** See Part 18.8 for explanation of Greenweb categories.

1 Within Biodiversity Corridors and Buffer Areas (refer to maps in 18R.1 of this Part):

i) The siting and design of development must minimise edge effects on Greenweb.

ii) Planting is to consist of :

- not less than 50% locally native species;
- species that reflect the relevant vegetation communities within the area; and
- a mix of groundcover, shrubs and trees.

iii) Within Biodiversity Corridors (refer to maps in 18R.1 of this Part):

- landscaping and revegetation must be designed to consolidate fragmented and linear vegetation and habitat areas within the site and adjacent sites.
- the width of Biodiversity Corridors should be enhanced and gaps and barriers reduced or minimised

# 18.6 CATEGORY - CANOPY REMNANT

## Objectives

1 *To protect smaller canopy remnant for habitat, species diversity and ecosystem services across a range of topographies.*

2 *To maintain trees for the services they provide to human well-being.*

3 *To improve air quality, prevent soil erosion, assist in improving water quality, carbon sequestration, storm water retention, energy conservation and noise reduction*

**Figure 18.6-1: Examples of Canopy Remnant**

## Controls

Canopy Remnant comprise areas that contain Key Vegetation Communities have little to no understorey and are smaller than those mapped within the other four Greenweb categories included within the Biodiversity Map of KLEP (Local Centres) 2012 (see Figure 18.6-1).

In addition to their intrinsic value as communities of high conservation priority, Canopy Remnant provide habitat for urban, transient or locally mobile species. They support species diversity and ecosystem services including maintenance of air and water quality, soil erosion, carbon storage.

| Category | Sub Category |
|---|---|
| Canopy Remnant | Smaller Key Vegetation Community patches NOT in good to moderate condition |

**Figure 18.6-1 Areas identified as Greenweb Canopy Remnant**

**Note:** See Part 18.8 for explanation of Greenweb categories.

1 Retain trees identified as Canopy Remnant on the Greenweb map (refer to maps in 18R.1 of this Part).

2 Planting within land identified as Canopy Remnant is to consist of:

i) not less than 30% locally native species;

ii) species that reflect the relevant vegetation communities within the area; and

iii) a mix of groundcover, shrubs and trees and is to exclude monocultures.

# 18.7 NO NET LOSS OF BIODIVERSITY

## Objectives

1 *To ensure maintenance of vegetation (particularly) canopy within the LGA, Covering a range of habitats, species and age classes. In recognition of the social and ecosystem services provided.*

2 *To facilitate continuity of the ecological diversity currently alive in the locality.*

3 *To increase the level of security for significant vegetation and habitat.*

4 *To allow for reasonable development while maintaining and enhancing biodiversity and ecological integrity.*

5 *To provide a range of mechanisms to achieve no net loss of significant vegetation or habitat.*

6 *To ensure that where biodiversity values need to be offset, policy requirements are applied consistently across developments and in such a way as to enhance the ecological integrity across the LGA.*

## Controls

1 Development proposals must seek to achieve no net loss of significant vegetation or habitat. Retention of vegetation and habitat in situ is the preferred method of biodiversity conservation. In the event that loss of vegetation is unavoidable, the loss must be mitigated and/or offset.

**Note:** Both informal compensatory measures and formal offsetting include a number of ecological, administrative and financial risks. The inclusion of such measures within a proposal does not preclude Council requiring redesign of, or refusing consent to, a proposal on grounds of biodiversity loss.

2 Any application for works within the Greenweb, must be accompanied by a proposal to protect, enhance or create habitat on or off site, where it:

i) requires the removal of native vegetation; or

ii) will negatively affect actual or potential habitat of fauna or flora; or

iii) is likely to cause degradation to vegetation or habitat.

3 No net loss of significant vegetation or habitat may be achieved by:

i) retention and protection of existing significant vegetation and habitat; or

ii) informal compensatory measures:

- planting and habitat creation, especially where it improves connectivity;
- rehabilitation of degraded areas; or
- translocation of plants or soils;

**Note:** Where disturbance to intact, resilient natural soil profiles (that are likely to contain a healthy native seedbank) is to occur, translocation to and establishment within a viable recipient site is a key action towards no net loss of significant vegetation or habitat.

**Note:** In certain circumstances Council may request that native flora, fauna, natural features (e.g. rocks, logs) or viable soil profiles are translocated. This material may be used by the proponent, Council or other relevant authority to aid either in the offsetting site or other restoration program.

iii) formal offsetting measures:

- such as offsetting on or off site in accordance with Part 7A of the NSW Threatened Species Conservation Act 1995 (also known as Biobanking).

**Note:** Conditions will apply to how and where offset actions are applied, and these will be determined by Council.

4 In determining the appropriate measures a number of factors must be considered:

i) size and condition of the vegetation or habitat;

ii) vegetation or habitat significance, including its legislative status, and its Greenweb category;

iii) scale and duration of the impact;

## 18.7 NO NET LOSS OF BIODIVERSITY (continued)

### Controls

iv) current and future landscape context;

v) level of uncertainty; and

vi) any other mitigation measures proposed as part of the development.

**Note:** It is strongly recommended that for developments considering offsetting that pre-lodgement discussions are held with Council.

5 Any proposal involving an offsetting mechanism, on or off site, must be in accordance with the following principles:

**i) Principle 1: Avoid, Minimise and Mitigate**

- Offsetting will only be considered once all efforts to avoid, minimise or mitigate any negative impacts have been exhausted.

**ii) Principle 2: Improve or Maintain Overall Biodiversity**

- In order to achieve no net loss, offsetting must seek to improve or maintain overall biodiversity.
- Offsetting must not be used as a justification for granting approval to developments, where the cumulative impacts are greater than the benefit to be obtained from the offset action.
- Offset sites are to be identified and selected in accordance with regional and local conservation priorities. Offset sites and actions must be assessed according to their long-term viability.

**iii) Principle 3: Like for Like**

- The area which receives offset actions (the offset site) must contain or restore the same ecological community or threatened species/population habitat as the area which is being adversely impact by the development or activity (the impact site).
- Within areas where one vegetation community grades into another (ecotone areas) flexibility will be permitted. Similarly, Council will consider offsetting to adjoining vegetation communities where a benefit to the relevant community is demonstrated.
- Where a proposal will impact an area of known breeding or key habitat for threatened species, the offset site must include known habitat for that species (i.e. the species is known to be present).
- Offsets that are not like for like will only be considered where no suitable 'like for like' offset is available or the alternate offset will provide a net biodiversity benefit of equal or greater ecological significance within the bioregion.

**iv) Principle 4: Supplement Existing Protection and Management**

- Offsets must be supplementary and provide for increased extent, improved condition and/or protection.

## 18.7 NO NET LOSS OF BIODIVERSITY (continued)

### Controls

**v) Principle 5: Enforceability**

- Offsets and their actions must be enforceable and include monitoring and reporting to ensure that the actions have been carried out, and are leading to positive biodiversity outcomes.

**vi) Principle 6: The Precautionary Principle**

- In conducting an offsetting action the precautionary principle must be applied. This principle requires that a conservation approach be taken, where there is uncertainty or lack of scientific confidence in an action and there are threats of serious or irreversible environmental damage.

6 An offsetting action will not be appropriate if:

i) the applicant fails to adequately demonstrate to Council's satisfaction that all measures to address the offsetting principals in Clause 4 have been taken.

ii) the proposed development is an inappropriate use of the land subject to the proposal, as assessed under the NSW Environmental Planning & Assessment Act 1979 and any local plans, policies or strategies.

iii) the applicant has failed to adequately demonstrate to Council the need for the offsetting action.

iv) the environmental impact in the development site is unacceptable. An example of how this may arise is where there is a likelihood of irreplaceable loss of biodiversity values that will not be adequately compensated by the proposed offsetting actions.

## 18.8 EXPLANATION OF GREENWEB CATEGORIES AND SUB CATEGORIES

Further background on this mapping, including a detailed mapping methodology is contained within the Ku-ring-gai Biodiversity and Riparian Lands Study Version 5.

**Note:** These categories are designed to be created in progressive order as listed below (from top to bottom) as data from one layer may be needed for those below. Where the criteria for an area fits within more than one category, the category listed first in the order shown below applies.

| | |
|---|---|
| ***Core Biodiversity Lands*** | **Office of Environment and Heritage Protected Areas**<br>**Description:** Formal reserves containing Office of Environment and Heritage estate managed for the purpose of biodiversity protection |
| | **Ku-ring-gai Natural Areas**<br>**Description:** Formal reserves consisting of areas managed by Ku-ring-gai Council as Natural Areas under the NSW Local Government Act 1993 for the purpose of biodiversity protection. |
| | **Regional Fauna Habitat**<br>**Description:** Regional Fauna Habitat as mapped by Ku-ring-gai Council consists of regionally important connected areas including private and public land. These areas provide resources for threatened and non-threatened fauna species and populations. |

| | |
|---|---|
| ***Support for Core Biodiversity Lands*** | **Key Vegetation Communities (KVC) adjoining Core Biodiversity Lands**<br>**Description:** Areas of KVC directly adjoining lands mapped as Core Biodiversity Lands |
| | **Local Fauna Habitat**<br>**Description:** Local Fauna Habitat as mapped by Ku-ring-gai Council is provided by isolated remnants located more centrally in the LGA. This includes areas within private and public land ownership. |
| | **Vegetation within Core Riparian Zones and KVC's adjoining**<br>**Description:** All vegetation within Core Riparian Zones (see Part 18), including native and non-native species, with the exception of Riparian Category 3a (consisting of piped creeks).<br>For Riparian Category 3a, mapped areas are limited to lands containing KVC's only **AND**<br>KVC's adjoining vegetation within Core Riparian Zones identified above.<br>**Note:** Only Core Riparian Zone areas are used. This excludes the 10m buffers applied to the Category 1 and 2 riparian lands. |
| | **All vegetation within Biodiversity Corridors**<br>**Description:** All vegetation including non local / non-native species, within Biodiversity Corridors as mapped by Ku-ring-gai Council.<br>**Note:** Areas lacking vegetation within biodiversity corridors are included within lands mapped as Biodiversity Corridors and Buffer Areas. |

## 18.8 EXPLANATION OF GREENWEB CATEGORIES AND SUB CATEGORIES (continued)

| | |
|---|---|
| ***Landscape Remnant*** | **Larger Key Vegetation Community (KVC) patches or KVC in good to moderate condition**<br>**Description:**<br>Patches (areas of adjoining) KVCs that are ≥ 0.1ha in size;<br>**OR**<br>KVC vegetation of good or moderate condition.<br>**Note:** Good condition vegetation, includes:<br>• Canopy, midstorey and understorey in good condition.<br>• Regeneration occurring within all layers.<br>• Native dominated within all layers.<br>Moderate condition vegetation, includes:<br>• Native medium to dense tree overstorey, with native shrub and ground layers, and<br>• Native dominated within 2 layers. |
| | **Significant trees within Key Vegetation Communities**<br>**Description:** Includes patches containing significant trees within KVCs identified by Ku-ring-gai Key Vegetation Community mapping. The mapping is not considered to capture every significant tree within the urban landscape. Factors considered in determining significance include; the presence of habitat (e.g. a hollow), provision of food for wildlife, and/or exceptional form or size. |
| ***Biodiversity Corridors and Buffer Areas*** | **Buffer Areas for Core Biodiversity Lands and Support for Core Biodiversity Lands**<br>**Description:** Includes all areas within 8m of lands mapped as Core Biodiversity Lands or Support for Core Biodiversity Lands. Including both vegetated and non-vegetated areas that are not already included within categories listed above.<br>**Note:** The buffering of Core Biodiversity Lands & Support for Core Biodiversity Lands required to create this layer, leaves a number of holes that are considered too small to inform planning decisions (less than 5 $m^2$). These areas were removed. |
| | **Biodiversity Corridor Areas Lacking Vegetation**<br>**Description:** This includes areas lacking vegetation, within Biodiversity Corridors as mapped by Ku-ring-gai Council.<br>**Note:** Vegetated areas within biodiversity corridors are included within lands mapped as Support for Core Biodiversity Lands. |

## 18.8 EXPLANATION OF GREENWEB CATEGORIES AND SUB CATEGORIES (continued)

| | |
|---|---|
| ***Canopy Remnant*** | **Smaller Key Vegetation Community Patches NOT in good to moderate condition**<br><br>**Description:** Patches (areas of adjoining) KVC (excluding areas containing vegetation in good or moderate condition) that are <0.1ha in size.<br><br>**Note:** Good condition vegetation includes:<br>• Canopy, midstorey and understorey in good condition.<br>• Regeneration occurring within all layers.<br>• Native dominated within all layers.<br><br>Moderate condition vegetation, includes:<br>• Native medium to dense tree overstorey, with native shrub and ground layers, and<br>• Native dominated within 2 layers. |

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