Rainbow lorikeets by Christina Farnworth

Ku·ring·gai Council
SERVIENDO GUBERNO

Ecological Information Pack

Guidelines for development applications

March 2018

Contact

Our Customer Service staff can answer most procedural questions. Where more detailed advice is required, Customer Service staff will refer you to our Duty Planning Officer.

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Boronia by Madeline Steel

What is the purpose of these guidelines?

These guidelines have been developed to provide an overview of the ecological assessment and submission requirements for development in Ku-ring-gai and to assist applicants to understand these requirements.

Why are there ecological requirements?

The natural environment is one of Ku-ring-gai's most important attributes. The extensive areas of bushland reserves and national parks, diverse fauna and flora and especially the tall native tree canopy, sets Ku-ring-gai apart from other areas of Sydney.

A fundamental aim of our development controls is to ensure that the built environment and new development does not dominate but rather harmonises with and contributes to the existing qualities of Ku-ring-gai's natural landscape.

We are committed to ensuring that development does not compromise the natural communities that occur within the area and to preserving our endangered plant communities and fauna species.

What are Endangered Ecological Communities Species?

Endangered Ecological Communities (EEC) are vegetation communities which have been classified as such under the NSW Biodiversity Conservations Act 2016 and/or under the Federal Environmental Protection and Biodiversity Conservation Act (EPBC).

Endangered species are individual flora or fauna species listed within these Acts. It is important to realise that these species do not necessarily occur just within EECs.

These communities and species are considered to be threatened within NSW and in some cases are nationally threatened, for example Blue Gum High Forest.

In Ku-ring-gai, EECs include Sydney Turpentine Ironbark Forest, Duffy's Forest Woodland and the critically endangered Blue Gum High Forest.

Endangered fauna and flora species in Ku–ring-gai include the Powerful Owl, Red Crowned Toadlet, Darwinia biflora, and many others

Further comprehensive information can be found at www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/about-threatened-species

How are EECs and endangered species relevant to Development Applications?

It is a requirement of the EPA Act, the Biodiversity Conservation Act 2016 as well as the Federal EPBC Act, that impacts on these species or communities are measured and addressed at the DA stage.

If this issue is not addressed as part of an application, this may delay the assessment of your application. We may reject your application or defer the assessment of your application, until information concerning such matters is provided to Council.

When are fauna and flora reports required?

Extensive areas within Ku-ring-gai contain remnants of native vegetation and bushland and many areas have been classified as an Endangered Ecological Communities (EEC) or may contain or provide habitat for endangered species.

Endangered Ecological Communities and species are protected under both state, *Biodiversity Conservation Act 2016*, and federal legislation, *Environmental Protection and Biodiversity Conservation Act*.

When assessing development applications, we must consider impacts upon EECs or endangered species. We will require these issues to be addressed as part of the DA submission by way of a fauna and flora report.

A fauna and flora report would be required where native vegetation, EECs or endangered species are identified as occurring on a site and there are likely to be direct or indirect impacts as a consequence of the development proposal.

The flora and fauna report describes and evaluates the vegetation and fauna species which may occur on or adjacent to the site and establishes whether threatened species or communities occur.

These reports are prepared by a suitably qualified ecologist.

How do I know if a fauna and flora report maybe required for my application?

While a degree of specialist knowledge is required to identify specific communities or species which may occur on or adjacent to an area, there are some general indicators in this regard.

Sites that have bushland on them or many native trees, areas of natural rock outcrops, riparian areas (creek line), sites near or adjacent to Council bushland reserves or national parks, are all likely to have ecological significance and may contain endangered communities or species.

If the proposed works involve direct or indirect impacts on native vegetation, such as soil and root disturbance, construction of drainage structures or other structures within the canopy spread of trees, changes of drainage to adjacent bushland areas or clearing for bushfire purposes, then a Fauna and Flora report may be required.

Where can I find information on EECs and threatened species?

We have some information which may be useful in assisting to identify the likelihood of there being ecological issues on your site.

Information on threatened communities can be found on our website at:
www.kmc.nsw.gov.au/About_Ku-ring-gai/Land_and_surrounds/Vegetation_and_flora/Endangered_ecological_communities

We have also mapped vegetation communities throughout Ku-ring-gai, and we have mapped areas of high ecological value within the Town Centres Local Environment Plan. Proposed works in these areas that may impact on vegetation would generally require a fauna and flora report. The mapped information can be found at:
http://www.kmc.nsw.gov.au/About_Ku-ring-gai/Land_and_surrounds/Web_Map_-_Online_mapping_tool?BestBetMatch=mapping|e53c7284-e97a-4c7b-a26a-4a2a08d8bb87|e91a03be-0845-436c-b4a3-a0c200c22557|en-AU

Information is also available from the *NSW Office of Environment & Heritage* concerning "Threatened Species".
www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species

Information is available from the Department of Environment and Heritage concerning EPBC Act:
www.environment.gov.au/epbc/guidelines-policies.html

What does a flora and fauna report contain?

The report should map and describe the study area, the site characteristics (both natural and built), the extent and type of vegetation that occurs within the study area and whether EECs or endangered species occur or are likely to occur in the study area, describe the proposal and the likely impacts on fauna and flora either direct or indirect.

The report may also propose mitigation measures to reduce impacts of the development proposal.

Should there be impacts, either direct or indirect, on threatened communities or species then an Impact Assessment (often known as a 5 part Test) under part 7.2 of the *Biodiversity Conservation Act 2016* would be required as part of the fauna and flora report.

This assessment is undertaken to establish the level of impact and whether the impacts on the community or species are considered significant.

Guidelines in relation to impact assessments can be found at:

www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/programs-legislation-and-framework/assessment-of-significance

Should the impact assessment conclude that the impact on endangered ecological communities, endangered populations and threatened species is significant, a species impact statement will be required.

What is a Biodiversity Development Assessment Report

Under part 7.2 of the *Biodiversity Conservation Act 2016*, where impacts on a threatened species, endangered population or an EEC is assessed as significant a Biodiversity development Assessment Report (BDAR) is required.

BDAR is a more detailed assessment of impacts on the species, community or population identified in the fauna flora report.

What is Council's role in assessment of fauna and flora reports?

When assessing a development application, we are obliged to consider the impact a development may have on the social, economic, natural and built environments.

Where there are EECs or endangered species or populations likely to occur on or adjacent to development site we need information to enable the proper assessment of impacts as required under *Biodiversity Conservation Act 2016*.

We will review the information provided to ensure that such assessments correctly establish likely impacts and reflect the actual communities that occur on site and that threatened species and populations have been properly considered.

Bushfire and threatened communities and species

All bushfire prone lands throughout Ku–ring-gai have been mapped by Council and are shown on our bushfire prone lands map:
http://www.kmc.nsw.gov.au/About_Ku-ring-gai/Land_and_surrounds/Bushfire/Bushfire_prone_areas?BestBetMatch=bushfire%20prone|e53c7284-e97a-4c7b-a26a-4a2a08d8bb87|e91a03be-0845-436c-b4a3-a0c200c22557|en-AU

The bushfire prone lands map shows areas of land which are affected by mapped bushfire prone vegetation zones and the bushfire prone vegetation buffer zone.

Where a site is mapped as containing bush fire prone vegetation or a bushfire prone vegetation buffer zone, then a bushfire report will be required with the development application.

Should the bushfire report require native vegetation removal or modification the impacts would need to be addressed in the fauna and flora report.

In regard to ecological issues, it is critical that the bushfire report specifically addresses issues of site vegetation management required to comply with the relevant bushfire guidelines.
In particular, the extent of vegetation removal or pruning recommended should be identified and quantified in the report.

If a property contains any of these zones, the proposal must be referred to the Rural Fire Service, who then make formal recommendations concerning both construction standards for bushfire protection and may make recommendations concerning the management of the site in general.

Such recommendations from the Rural Fire Service may have significant implications ecologically, such as the maintenance of the site as an inner protection area (IPA), in accordance with Planning for Bushfire Protection (2017).

The maintenance of a site as an IPA may involve works including maintenance of understorey vegetation and the pruning or removal of trees.

Where there is ongoing maintenance proposed or where appropriate rehabilitation works within such communities are to be undertaken we may require a vegetation management plan to be prepared.

Riparian (watercourse) zones

Ku-ring-gai's streams and watercourses have been divided into three categories. The width of the riparian area associated with each category is dependant on the classification of the stream within the policy. Objectives have been set for each watercourse category.

Our Riparian Policy outlines these requirements: http://www.kmc.nsw.gov.au/files/assets/public/hptrim/information_management_-_publications_-_public_website_-_ku-ring-gai_council_website/plans_policies_and_strategies/riparian_policy_adopted14122004.pdf

The Riparian Policy aims to rehabilitate and preserve riparian areas. In these areas the planting of locally occurring riparian zone species and removal of weeds is encouraged.

Structures, including retaining walls paving, bridges and the like, are not generally permitted within riparian areas. Piping of watercourse is also not permitted.

Clearing of vegetation for bushfire purposes is not supported within riparian areas.

Riparian areas are often of high ecological value and may contain threatened species or communities. Works within riparian areas, other than for rehabilitation purposes, are generally not encouraged.

Where works are proposed within riparian areas a vegetation management plan will be required.

Further information see "Riparian Lands" DCP http://www.kmc.nsw.gov.au/Plans_regulations/Building_and_development/Town_Planning_Documents

Vegetation management plans

Vegetation management plans (VMP), provide a detailed methodology in relation to the management and regeneration of native vegetation.

They will include information concerning the area to be managed, the current status of the vegetation within the riparian zone or other ecologically sensitive areas, strategies both in the short and long term in relation to management and rehabilitation of the area, and a schedule of works, procedures and processes for the works.

Vegetation management plans may be required where there will be impacts, either direct or indirect upon areas such as riparian zones and native bushland.

The need for such a plan may also have been identified within the fauna and flora report or we may require such a report to be submitted where a commitment to vegetation management is an important component of the development proposal.

Our Riparian Policy outlines these requirements: http://www.kmc.nsw.gov.au/files/assets/public/hptrim/information_management_-_publications_-_public_website_-_ku-ring-gai_council_website/plans_policies_and_strategies/riparian_policy_adopted14122004.pdf.

Water Dragon by Kerstin Siegmund

General flora and fauna report guidelines

A flora and fauna report should contain the following information:

1. Relevant scientific licensing e.g. National Parks and Wildlife Licensing

2. Regulatory profile of the study area (address local, state and federal environmental planning instruments relevant to flora and fauna protection and management and biodiversity conservation).

3. Physical description of the study area, including details on the hydrology and types and condition of the habitat(s) in, and adjacent to, the land affected by the proposal.

4. The content and methods of a fauna and flora assessment should be consistent with threatened biodiversity survey and Assessment Guidelines for Developments and Activities Working Draft, dated November 2004 and prepared by Department of Environment and Conservation.

5. Data sources used to obtain background information and identify limitations and assumptions of the data and the study.

6. Consideration of all threatened fauna and flora species within a 10km locality of the site. Records of threatened species are to be obtained from Bionet and National Parks Wildlife Atlas for consideration in the fauna and flora assessment.

7. The ecological assessment report will need to take into account the requirements of the Rural Fire Service (RFS) asset protection zones (APZ) to protect any proposed building.

8. Map of the study area that clearly shows the site locality, existing vegetation and extent of the development on the site.

9. A list and survey plan of all species of fauna and flora identified on site or identified as likely to occur (native and introduced species).

- The survey must cover the entire site and beyond if necessary, not just the area proposed for development, and
- The survey must detail survey design and include methods used, location of survey sites and photographs, the date, time, weather when the site was surveyed, and the effort (time spent) undertaking each survey type.

10. Vegetation community description and map indicating structure, spatial distribution, condition, integrity, nature of any disturbance and consideration of the likely original vegetation community.

11. Fauna habitat description on the site and consideration of corridors, migratory routes and drought refuges.

12. A list and map showing the location of those threatened species, populations or ecological communities known to occur in the same or similar habitats in the region.

13. An assessment of the likelihood of those species, populations or ecological communities identified, occurring within the study area.

14. Consideration of the nature of the proposal and actual and cumulative impacts of the proposal (including impacts resulting from any bush fire asset protection zones, onsite effluent disposal areas and stormwater management or landscaping works etc.) on habitat requirements of the species, populations or ecological communities within the study area.

15. Assessment of whether the proposal will have or is likely to have a significant impact on rare or threatened species, populations, their habitats and endangered ecological communities as determined by state legislation. - The recently revised "Five Part Test" in accordance with the *Biodiversity Conservation Act 2016*.

16. Even if there is no likely occurrence of threatened species populations or ecological communities or their habitats, a statement addressing the factors of the "Five Part Test" which highlights their absence and or unlikely occurrence, and the likelihood of a significant effect resulting from the proposal must be made.

17. Commonwealth Legislation - Consideration of whether the action will have, or is likely to have, a significant impact on items of national environmental significance including nationally listed threatened species, ecological communities and World Heritage Areas under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Refer to EPBC Act Administrative Guidelines on Significance, 2000, by Commonwealth Department of Environment and Heritage at www.deh.gov.au/epbc or phone 1800 803 772.

18. Rare species of flora – consideration of whether the development may have an impact on any locally significant rare species of flora as listed in the publication entitled "Rare or Threatened Australian Plants" (ROTAP), Briggs and Leigh, 1995 Revised Edition or search for ROTAP listed plants by geographical area at the following website www.plantnet.rbgsyd.nsw.gov.au/search/spatial.

19. A conclusion, summarising the results of the assessment and determining the need for any species impact statement.

20. Recommendations for mitigating, ameliorative or compensatory measures to ensure expected impacts are avoided, minimised or managed appropriately, including the provision of adequate buffers to sensitive features and the protection and special management of resources/habitat required by likely threatened species/populations/communities.

21. References – include references for all documents referred to in the assessment.

Useful References

- NSW Department of Environment and Conservation, *Working Draft Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities*, dated November 2004.
- The Office of Environment & Heritage website for Threatened species www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species
- www.wildlifeatlas.nationalparks.nsw.gov.au for the Wildlife Atlas database.
- www.deh.gov.au/epbc for Department of Environment and Heritage website for Environment Protection and Biodiversity Conservation Act for the Administrative Guidelines on Significance and threatened species and protected matters databases.
- www.plantnet.rbgsyd.nsw.gov.au/search/spatial for a search of ROTAP listed plants.
- Threatened species determinations made by the NSW Threatened Species Scientific Committee: www.environment.nsw.gov.au/committee/AboutTheNSWScientificCommittee.htm

Definition of terms

Subject site: the area directly affected by the proposal.

Study area: the subject site and any additional areas which are likely to be affected by the proposal, either directly or indirectly. The study area should extend as far as is necessary to take all potential impacts into account.

Direct impacts: those that directly affect the habitat and individuals. They include, but are not limited to, death through predation, trampling, poisoning of the animal/plant itself and the removal of suitable habitat. When applying each factor, consideration must be given to all of the likely direct impacts of the proposed activity or development.

Indirect impacts: occur when project-related activities affect species, populations or ecological communities in a manner other than direct loss. Indirect impacts can include loss of individuals through starvation, exposure, predation by domestic and/or feral animals, loss of breeding opportunities, loss of shade/shelter, deleterious hydrological changes, increased soil salinity, erosion, inhibition of nitrogen fixation, weed invasion, fertiliser drift, or increased human activity within or directly adjacent to sensitive habitat areas. As with direct impacts, consideration must be given, when applying each factor, to all of the likely indirect impacts of the proposed activity or development.

Geraldton Wax flower by Anna Carlton


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